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Natural Gas Monthly
December 1999

Energy Information Administration
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

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Natural Gas Publications and Databases Available Electronically

All of the natural gas publications are available electronically on the EIA website. Certain natural gas data are also provided in database formats on the web site. The table below is a guide to the major natural gas products.

Product	Format	Contents
Publications		
Natural Gas Weekly Market Update	PDF	Analysis of current price, supply and storage data
Natural Gas Monthly	PDF	Monthly supply, disposition, and price data
Natural Gas Annual	PDF	Annual supply, disposition, and price data
Historical Natural Gas Annual	PDF	Historical annual supply, disposition, and price data from 1930 - 1997
Issues and Trends	PDF	Comprehensive analysis of growth and change in the natural gas industry
U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves	PDF	Proved reserves in the United States
Oil and Gas Field Code Master List	PDF	Listing of U.S. oil and gas field names
Databases		
Monthly Data	TXT	Tables 1-6, and 9 from the *Natural Gas Monthly*
Historical Monthly Data	EXE	Consumption and price data, 1984-1994; 1995-present
Annual Data	TXT	Tables from the *Natural Gas Annual*
Historical Annual Data	TXT	Tables from the *Historical Natural Gas Annual*
Field Codes	EXE	Oil & Gas Field Code Master List
Applications		
EIA-176 Query System	EXE	Company filings to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"
EIAGIS	EXE	Periodic updates for users of the EIAGIS-NG Geographic Information System

PDF files are image files that can be viewed through Adobe Acrobat.

TXT files are ASCII text. They may be replications of published tables, including table titles, column and row identification, or they may be flat files with a minimum of content description suitable for input to spreadsheets or other programs.

EXE files are executables that can be downloaded then opened. Databases are distributed as self-executing Zipped archives which spawn numerous data files and documentation. Applications are distributed as self-executing Zipped archives which initially generate numerous files and then form an application which is installed on the user's PC.

Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

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Highlights

Overview

This issue of the *Natural Gas Monthly* provides the first estimates for the full year 1999 for many data series at the national level. Estimates of natural gas prices are available through September 1999 for most series. Highlights of the data estimates contained in this issue are:

- Net imports of natural gas showed a considerable increase of 13 percent in 1999, aided by pipeline capacity expansions that went on line in late 1998.
- Dry natural gas production in 1999, at 18,716 billion cubic feet, kept pace with that of 1998.
- End-use natural gas consumption in 1999, at 19,625 billion cubic feet, was nearly 1 percent higher than in 1998.
- Natural gas end-use prices through September 1999 are generally lower than in 1998 during the same period, but the national average wellhead price exceeds that of 1998.

Supply

Both net withdrawals from storage and increased imports helped to meet the rise in natural gas consumption seen in 1999, as production of natural gas remained even with the 1998 level. Preliminary estimates show that 18,716 billion cubic feet of dry natural gas was produced in 1999, virtually the same as the 1998 level (Figure HI1, Table 1). However, in 1998, production had declined by 1 percent from the 1997 level. On a monthly basis, dry production during 1999 was generally lower than that of 1998 through August, then exceeded the 1998 levels the rest of the year. The largest increase occurred in September 1999, when production was 92 billion cubic feet, or 6 percent higher than in September 1998. The year ended with an estimated 1,590 billion cubic feet produced in December 1999, 52 billion cubic feet, or 3 percent more than in December 1998.

Net imports of natural gas rose considerably in 1999, reaching an estimated 3,373 billion cubic feet, 13 percent more than the 1998 level (Table 2). Several pipeline expansions took place in late 1998, increasing the capacity to import natural gas from Canada, the source of almost all natural gas imports into the United States.[1] The largest expansion was 700 million cubic feet by Northern Border Pipeline Company, increasing import capacity on that system by roughly one-third. This expansion mainly serves customers in the Chicago, Illinois area.

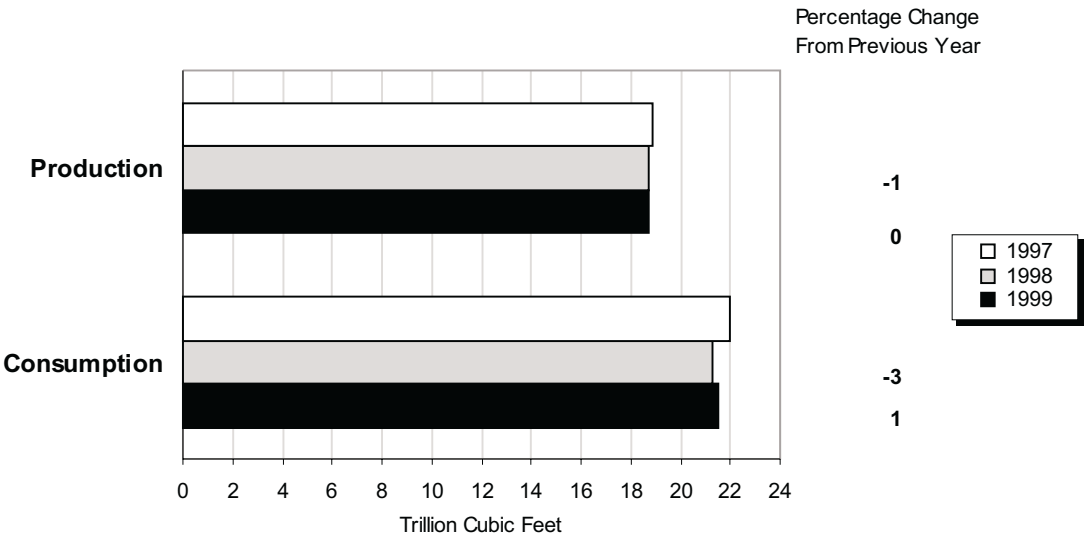
Other pipeline activity in late 1999 provides the potential for further increases in imports during 2000. Natural gas production began flowing from newly developed fields in the North Atlantic off Sable Island, east of Nova Scotia, Canada on December 18, 1999.[2] Initial production was 110 million cubic feet per day. Production is expected to increase quickly to 400 million cubic feet per day despite a shut down of production in early January 2000 to repair mechanical problems.[3] The gas is being transported through the new Maritimes and Northeast Pipeline to serve markets in eastern Canada and New England. Initial

1 Energy Information Administration, *Natural Gas Annual*, DOE/EIA-0131(98) (Washington, DC, October 1999), pp. 18-20.

2 Sable Offshore Energy, Inc. "News Releases," http://www.soep.com/soep-bin/pr-get?80 (January 4, 2000).

3 Individual.com, "Gas stops flowing from Canada's Sable project." http://www.individual.com/story.shtml?story=d0107160.700 (January 10, 2000).

Figure HI1. Natural Gas Production and Consumption, January-December, 1997-1999



Source: Table 2.

flow in this onshore pipeline began on January 4, 2000. Import capacity on this line at the U.S. border is currently 400 million cubic feet per day. Production from the Sable Island fields is expected to exceed 500 million cubic feet per day by the end of 2000.

Withdrawals of natural gas from underground storage facilities exceeded injections during 1999, the reverse of what occurred in 1998. Storage activities relate more to the heating season (November through March) and the refill or nonheating season (April through October) than they do to the calendar year. However, net withdrawals during the calendar year 1999 were 159 billion cubic feet, while during 1998 they were -526 billion cubic feet—the negative value indicating that more gas was injected into storage than withdrawn (Table 9). Working gas in storage at the end of December 1999 is estimated to be 2,464 billion cubic feet. While this is 10 percent lower than at the end of December 1998, it is the second-highest level of working gas for the end of December since 1994 (Figure HI2).

End-Use Consumption

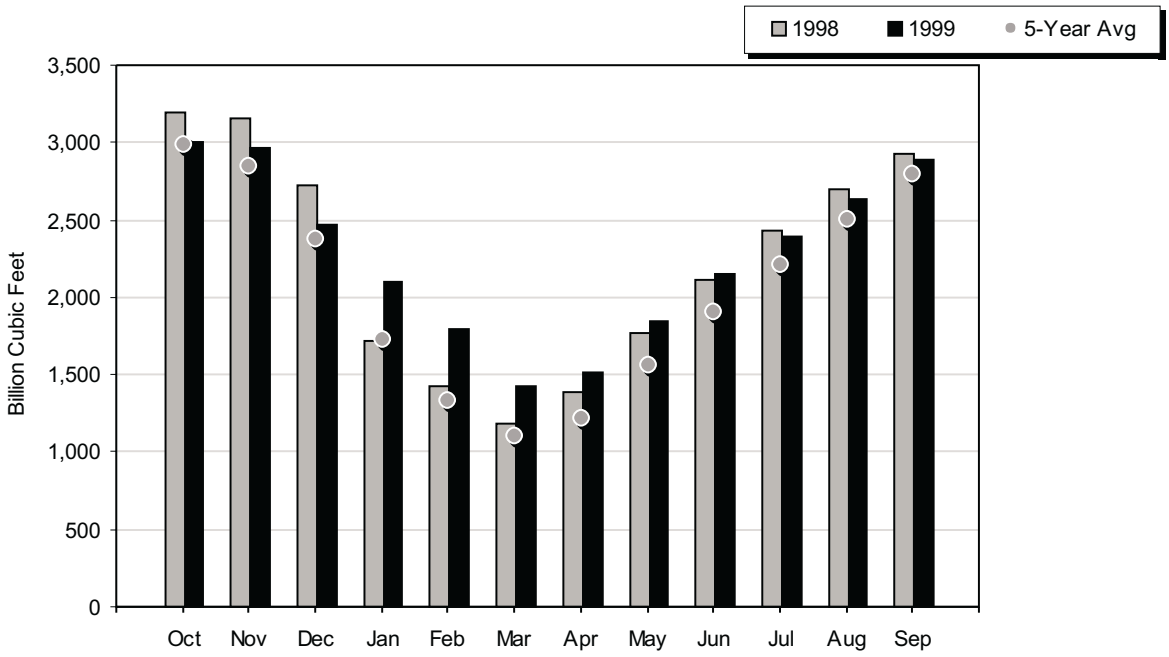
End-use consumption of natural gas is estimated to be 19,625 billion cubic feet in 1999, 156 billion cubic feet, or nearly 1 percent higher than in 1998 (Table 3 and Figure HI3). End-use consumption in 1998 had been 3 percent lower than in 1997. The increase in 1999 is attributed to the residential and commercial sectors, which both increased consumption by 3 percent compared with 1998. Residential consumption in 1999 was 4,650 billion cubic feet and commercial consumption was 3,094. The industrial sector continued to account for the largest proportion of end-use consumption in 1999, 44 percent. Estimated at 8,694 billion cubic feet in 1999, industrial consumption was only 8 billion cubic feet higher than in 1998, an increase of one-tenth percent.

Consumption estimates for the electric utility sector are available only through September 1999. Cumulatively through September, electric utility consumption of natural gas is estimated to be 2,541 billion cubic feet. This is 4 percent lower than in 1998 but 8 percent higher than in 1997 for the same period.

Prices

Estimates of wellhead, city gate, and most end-use prices are available for the first three-quarters of 1999 (Table 4). Cumulatively, end-use prices in 1999 were lower than in 1998, while the average wellhead price exceeded that of 1998 (Figure HI4). The average monthly wellhead price increased in August and September 1999, in contrast to 1998, when it declined during those months. Thus, the September 1999 estimate of $2.42 per thousand cubic feet is 43 percent

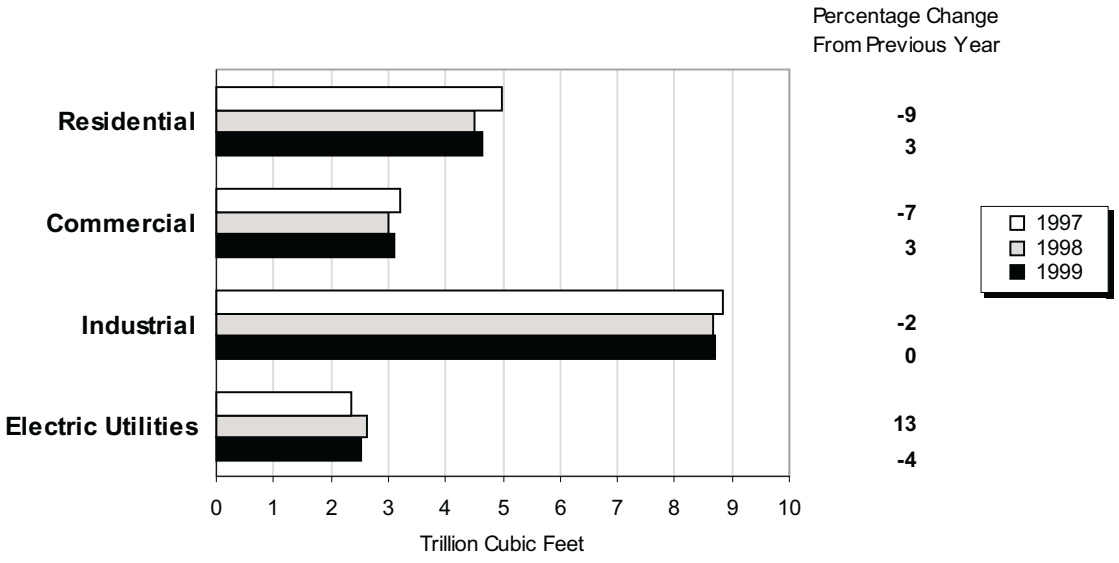
Figure HI2. Working Gas in Underground Storage in the United States, 1998-1999



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Figure HI3. Natural Gas Delivered to Consumers, January-December, 1997-1999



Note: Electric utilities reflect January-September deliveries.

Source: Table 3.

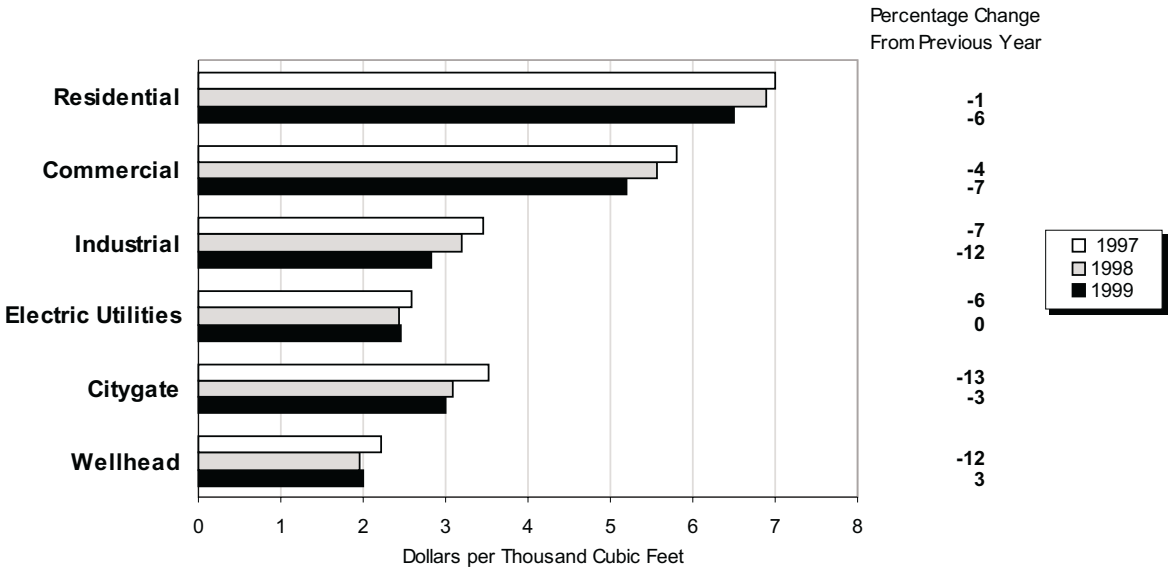
higher than the September 1998 price of $1.69. Cumulatively through September, the average wellhead price is $2.01 per thousand cubic feet in 1999, 3 percent higher than for the same period in 1998.

The average city gate price—the price paid for natural gas by local distribution companies—is estimated to be $3.00 per thousand cubic feet through September 1999. This is 3 percent lower than in 1998. Cumulative residential, commercial, and industrial prices[4] through September are all lower in 1999 than in 1998, by 6, 7, and 12 percent, respectively. The cumulative average price paid for natural gas by electric utilities, available through August 1999, is estimated to be $2.45 per thousand cubic feet, one cent higher than in 1998.

More recently, futures settlement prices and average spot prices at the Henry Hub have been in the general range of $2.20 to $2.60 per million Btu during December 1999, and have fallen below $2.20 per million Btu in early January 2000 (Figure HI5). Generally mild temperatures from November 1999 through early January 2000, and plentiful supplies of natural gas in storage have contributed to keeping prices below $3.00 per million Btu.

"Y2K" problems were few and minor in the natural gas industry as the result of extensive preparations for the rollover from 1999 to 2000. Several electricity generators in the Northeast switched from natural gas to on-site supplies of oil over the New Year's weekend as a precaution,[5] but no "Y2K" delivery problems were reported on natural gas pipelines or distribution systems. Minor glitches, such as the date "1/1/100" appearing on a pipeline company's Internet site for capacity availability, were readily corrected.[6]

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-September, 1997-1999



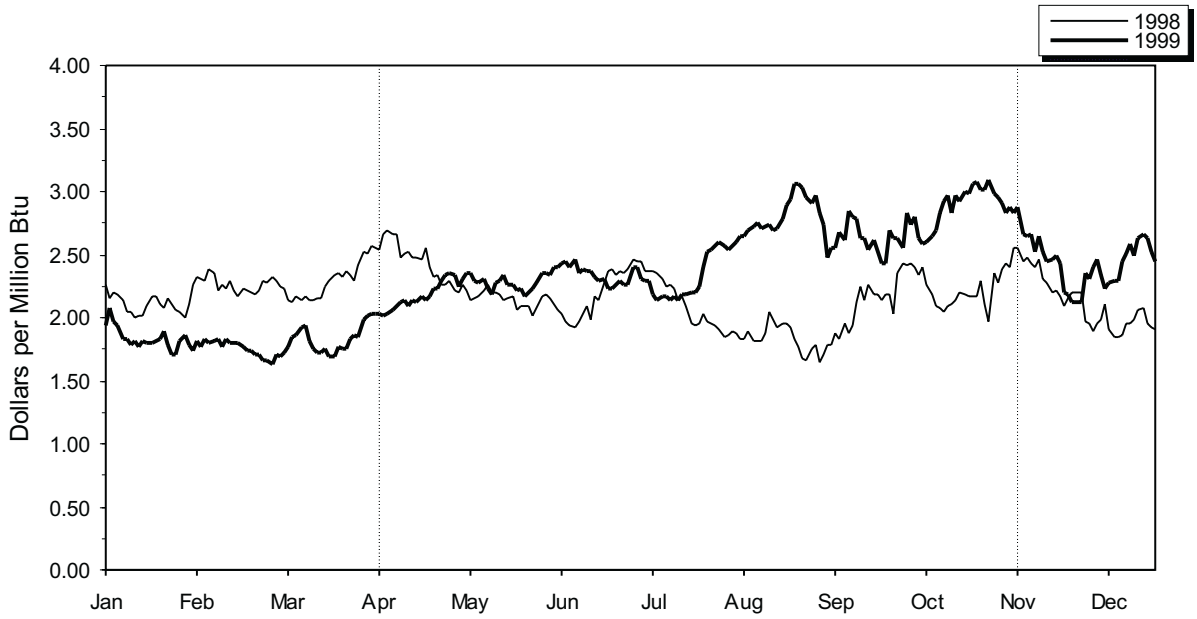
Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices.
Source: Table 4.

4 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, during 1999 they have ranged from 54 to 72 percent of commercial deliveries and only 15 to 19 percent of industrial deliveries (Table 4).

5 "Cash piggybacks on a stronger NYMEX," *Gas Daily* (December 30, 1999), p. 1.

6 "A Scattering of Glitches Aside, Gas, Power Sectors Pass Y2K OK," *Natural Gas Week* (January 10, 2000), p. 3.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The future price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Table 1. Summary of Natural Gas Production in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production (Wet)	Extraction Loss[b]	Dry Gas Production[c]
1993 Total	**22,726**	**3,103**	**414**	**227**	**18,982**	**886**	**18,095**
1994 Total	**23,581**	**3,231**	**412**	**228**	**19,710**	**889**	**18,821**
1995 Total	**23,744**	**3,565**	**388**	**284**	**19,506**	**908**	**18,599**
1996 Total	**24,114**	**3,511**	**518**	**272**	**19,812**	**958**	**18,854**
1997							
January	2,089	305	50	25	1,709	83	1,626
February	1,905	289	46	22	1,549	75	1,473
March	2,103	311	51	23	1,719	83	1,636
April	1,993	285	48	22	1,639	80	1,559
May	2,041	268	50	22	1,701	83	1,619
June	1,952	275	47	18	1,612	78	1,533
July	2,020	272	51	23	1,674	81	1,593
August	2,022	279	52	21	1,671	81	1,590
September	1,988	285	50	21	1,632	79	1,553
October	2,057	307	51	20	1,679	81	1,597
November	1,999	302	52	19	1,626	79	1,547
December	2,044	314	52	22	1,656	80	1,575
Total	**24,213**	**3,492**	**599**	**256**	**19,866**	**964**	**18,902**
1998							
January	2,093	307	48	19	1,719	82	1,637
February	1,877	291	49	17	1,520	73	1,448
March	2,081	310	51	20	1,700	81	1,619
April	1,994	284	50	20	1,640	78	1,562
May	2,035	266	47	16	1,705	81	1,624
June	1,975	271	49	21	1,634	78	1,556
July	2,002	265	51	20	1,666	80	1,586
August	2,024	273	53	20	1,678	80	1,598
September	1,874	276	51	20	1,527	73	1,454
October	2,026	297	58	21	1,650	79	1,571
November	1,954	292	52	20	1,591	76	1,515
December	1,988	302	51	20	1,615	77	1,538
Total	**23,924**	**3,433**	**611**	**234**	**19,646**	**938**	**18,708**
1999							
January	E2,084	E317	E58	RE20	E1,688	E82	E1,606
February	E1,878	E274	E54	E18	E1,532	E74	E1,458
March	E2,080	E307	E59	E21	E1,693	E82	E1,611
April	E1,962	E289	E42	E21	E1,610	E78	E1,532
May	E2,007	E264	E44	E21	E1,677	E81	E1,596
June	E1,956	E279	E42	E21	E1,614	E78	E1,536
July	RE1,996	RE283	RE44	RE21	E1,648	E80	E1,568
August	RE1,971	RE271	RE42	RE20	RE1,638	RE79	RE1,559
September	RE1,964	RE276	RE42	E21	E1,625	E79	E1,546
October	E2,012	E281	E43	E21	E1,666	E81	E1,585
November(STIFS)	NA	NA	NA	NA	E1,608	E78	E1,530
December(STIFS)	NA	NA	NA	NA	E1,671	E81	E1,590
Total	NA	NA	NA	NA	**E19,670**	**E954**	**E18,716**

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[b] Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Equal to marketed production (wet) minus extraction loss.

E Estimated Data.

RE Revised Estimated Data.

NA Not Available.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1993-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998.* January 1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels[a]	Net Imports	Net Storage Withdrawals[b]	Balancing Item[c]	Consumption[d]
1993 Total	**18,095**	**119**	**2,210**	**-36**	**-110**	**20,279**
1994 Total	**18,821**	**111**	**2,462**	**-286**	**-400**	**20,708**
1995 Total	**18,599**	**110**	**2,687**	**415**	**-230**	**21,581**
1996 Total	**18,854**	**109**	**2,784**	**2**	**217**	**21,967**
1997						
January	1,626	12	266	709	-98	2,515
February	1,473	10	228	371	163	2,246
March	1,636	9	241	160	66	2,113
April	1,559	8	224	-61	64	1,795
May	1,619	8	232	-333	62	1,588
June	1,533	6	223	-379	69	1,452
July	1,593	7	225	-293	8	1,540
August	1,590	8	227	-334	31	1,522
September	1,553	6	226	-349	5	1,443
October	1,597	8	239	-218	-93	1,533
November	1,547	10	259	196	-122	1,889
December	1,575	11	246	553	-68	2,318
Total	**18,902**	**103**	**2,837**	**24**	**92**	**21,959**
1998						
January	1,637	11	270	486	-2	2,401
February	1,448	9	240	301	114	2,111
March	1,619	10	244	255	-4	2,123
April	1,562	8	240	-206	102	1,705
May	1,624	7	242	-402	29	1,500
June	1,556	6	230	-336	6	1,462
July	1,586	8	255	-326	49	1,572
August	1,598	8	264	-286	-1	1,583
September	1,454	7	250	-231	-10	1,471
October	1,571	8	253	-269	-81	1,482
November	1,515	10	246	32	-85	1,717
December	1,538	11	259	452	-131	2,129
Total	**18,708**	**102**	**2,993**	**-530**	**-11**	**21,262**
1999						
January	E1,606	R10	295	623	R3	2,538
February	E1,458	R8	262	333	R54	2,114
March	E1,611	R8	276	297	R-43	2,149
April	E1,532	R8	267	-91	R57	1,773
May	E1,596	R8	272	-337	R-10	1,528
June	E1,536	R6	264	-306	R-56	1,445
July	E1,568	R7	R276	-225	R-96	1,530
August	RE1,559	R8	RE298	-238	R-38	R1,588
September	E1,546	R7	RE292	-310	R-92	1,444
October	E1,585	E8	E299	-148	E-233	E1,511
November(STIFS)	E1,530	E11	E290	E37	E-175	E1,693
December(STIFS)	E1,590	E12	E282	E525	E-211	E2,198
Total	**E18,716**	**E101**	**E3,373**	**E159**	**E-839**	**E21,511**

[a] Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0022 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

[b] Monthly and annual data for 1993 through 1998 include underground storage and liquefied natural gas storage. Data for January 1999 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

[c] Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

[d] Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

[R] Revised Data.

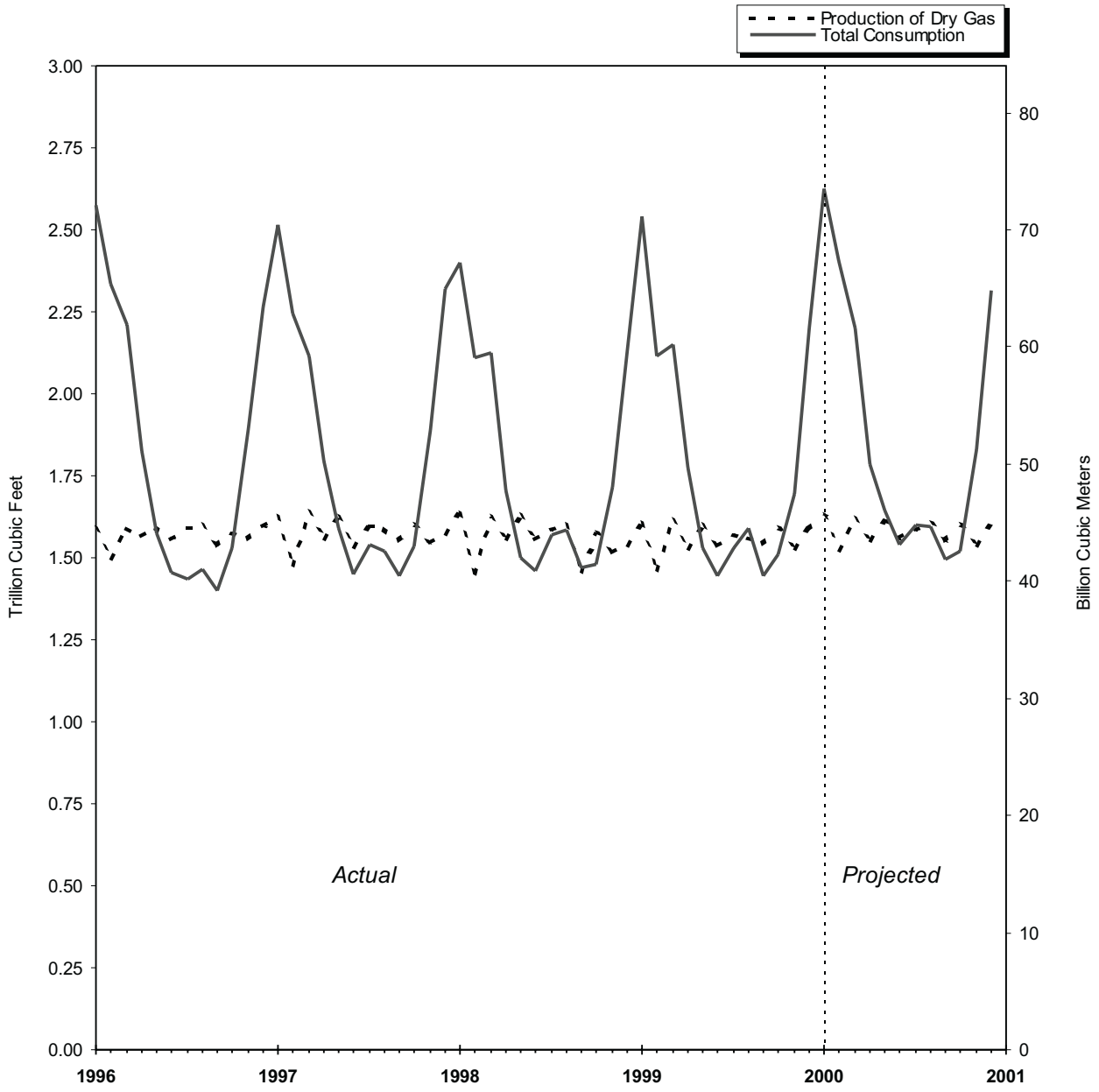
[E] Estimated Data.

[RE] Revised Estimated Data.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1993-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*. 1998: EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, " Monthly Underground Gas Storage Report," and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports and EIA computations. January 1999 through current month: EIA, Form EIA-895, Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1996-2000



Sources: 1996 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook*

Table 3

Table 3. Natural Gas Consumption in the United States, 1993-1999

(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel[a]	Pipeline Fuel[b]	Delivered to Consumers					Total Consumption
			Residential	Commercial [c]	Industrial	Electric Utilities	Total	
1993 Total	**1,172**	**624**	**4,956**	**2,863**	**7,981**	**2,682**	**18,483**	**20,279**
1994 Total	**1,124**	**685**	**4,848**	**2,897**	**8,167**	**2,987**	**18,899**	**20,708**
1995 Total	**1,220**	**700**	**4,850**	**3,034**	**8,580**	**3,197**	**19,660**	**21,581**
1996 Total	**1,250**	**711**	**5,241**	**3,161**	**8,870**	**2,732**	**20,006**	**21,967**
1997								
January	104	87	902	474	809	139	2,324	2,515
February	94	78	757	420	753	143	2,074	2,246
March	104	73	606	360	781	190	1,936	2,113
April	99	61	433	269	739	193	1,635	1,795
May	102	54	284	204	713	232	1,432	1,588
June	97	49	164	154	691	297	1,306	1,452
July	101	52	128	144	686	429	1,388	1,540
August	101	51	118	140	721	391	1,369	1,522
September	99	49	129	142	691	333	1,295	1,443
October	102	52	234	190	711	244	1,379	1,533
November	99	65	497	306	743	180	1,725	1,889
December	101	80	731	414	794	197	2,136	2,318
Total	**1,203**	**751**	**4,984**	**3,219**	**8,832**	**2,968**	**20,004**	**21,959**
1998								
January	101	73	812	451	793	171	2,227	2,401
February	90	64	692	393	739	134	1,957	2,111
March	101	64	648	367	750	194	1,959	2,123
April	97	51	408	256	704	190	1,558	1,705
May	99	44	221	170	676	290	1,357	1,500
June	96	43	153	138	654	379	1,323	1,462
July	97	47	132	142	704	449	1,428	1,572
August	98	47	117	144	719	457	1,438	1,583
September	90	44	121	140	695	381	1,337	1,471
October	98	44	203	173	718	246	1,340	1,482
November	94	51	398	264	732	178	1,572	1,717
December	96	64	616	362	803	189	1,969	2,129
Total	**1,157**	**635**	**4,520**	**3,005**	**8,686**	**3,258**	**19,469**	**21,262**
1999								
January	106	76	903	484	791	179	2,356	2,538
February	96	63	680	398	725	152	1,955	2,114
March	106	64	660	383	729	206	1,978	2,149
April	101	53	417	265	682	256	1,619	1,773
May	105	46	234	184	686	273	1,378	1,528
June	101	43	155	148	673	324	1,300	1,445
July	103	46	129	146	670	436	1,381	1,530
August	[RE]103	[R]47	118	145	741	434	1,438	[R]1,588
September	102	43	136	144	738	281	1,299	1,444
October(STIFS)	105	48	210	178	721	[NA]	1,359	1,511
November(STIFS)	101	58	352	238	735	[NA]	1,534	1,693
December(STIFS)	105	66	655	379	805	[NA]	2,027	2,198
Total	**1,232**	**654**	**4,650**	**3,094**	**8,694**	—	**19,625**	**21,511**

[a] Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[b] Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption(excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Deliveries to Commercial consumers for 1993-1998 include vehicle fuel deliveries, which totaled, in billion cubic feet, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995, 2.9 in 1996, 4.4 in 1997, and 5.1 in 1998.

[R] Revised Data.

[RE] Revised Estimated Data.

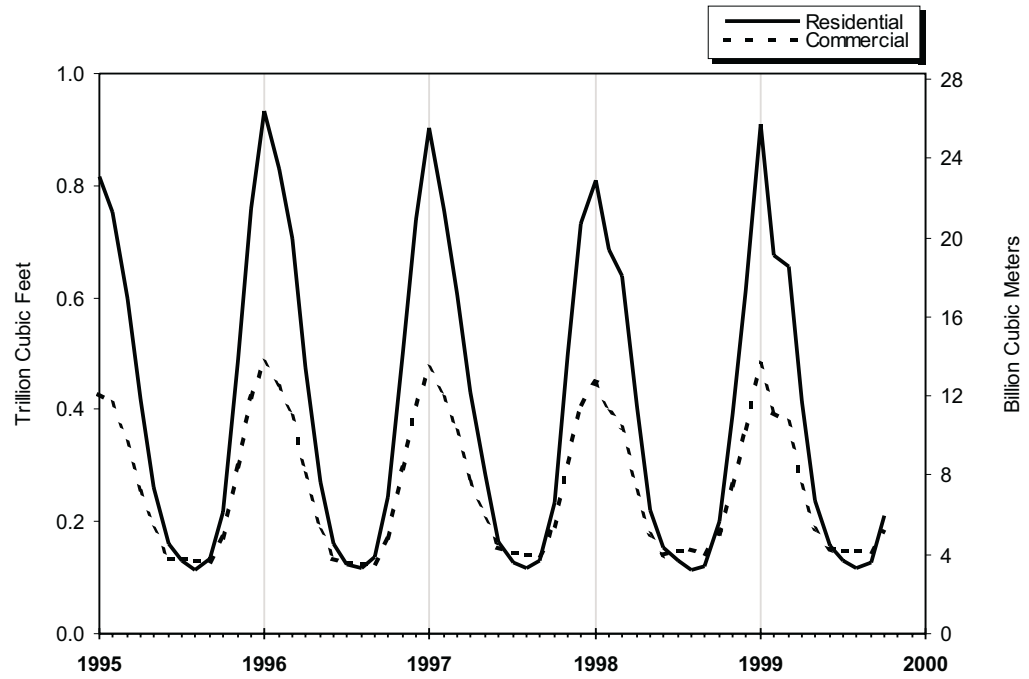
[NA] Not Available.

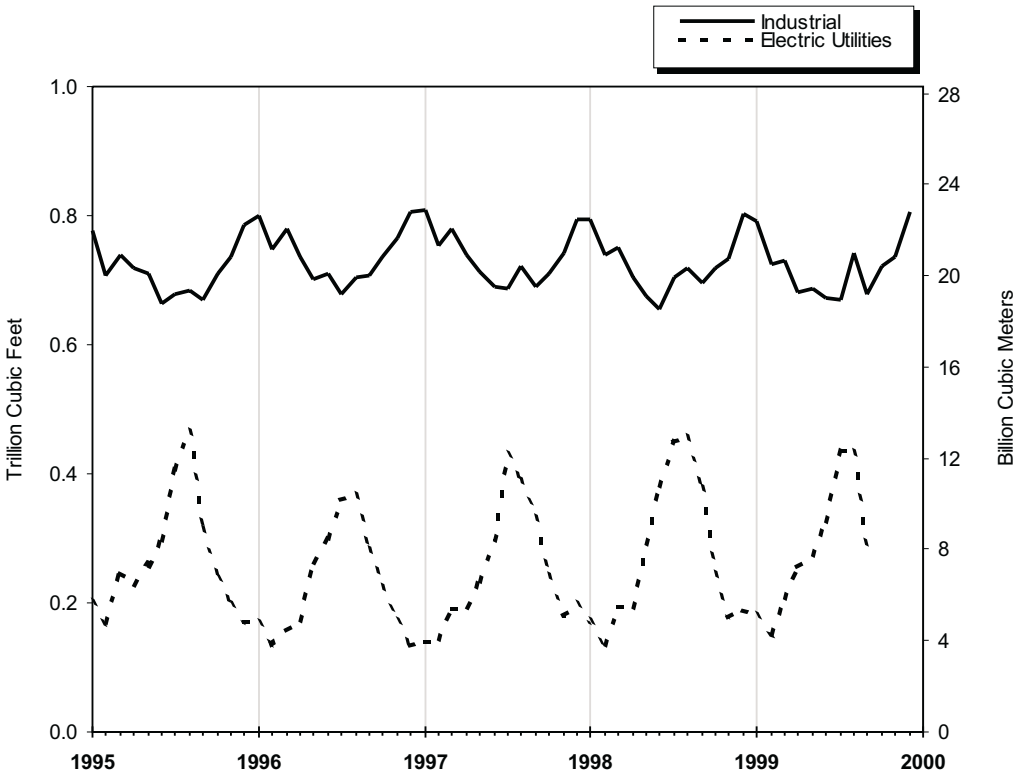
— Not Applicable.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified' as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1993-1998: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1998.* January 1999 through the current month: EIA: Form EIA-895, Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1995-1999





Sources: Table 3.

Table 4

Table 4. Selected National Average Natural Gas Prices, 1993-1999

(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price[a]	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total[b]	Price	% of Total[b]	
1993 Annual Average	**2.04**	**3.21**	**6.16**	**5.22**	**83.9**	**3.07**	**29.7**	**2.61**
1994 Annual Average	**1.85**	**3.07**	**6.41**	**5.44**	**79.3**	**3.05**	**25.5**	**2.28**
1995 Annual Average	**1.55**	**2.78**	**6.06**	**5.05**	**76.7**	**2.71**	**24.5**	**2.02**
1996 Annual Average	**2.17**	**3.34**	**6.34**	**5.40**	**77.6**	**3.42**	**19.4**	**2.69**
1997								
January	3.40	4.28	6.74	6.19	78.7	4.60	17.5	4.06
February	2.49	3.76	6.79	6.14	78.3	4.18	17.8	2.97
March	1.79	3.07	6.52	5.73	73.9	3.34	17.9	2.29
April	1.81	2.92	6.53	5.46	71.8	3.10	18.0	2.30
May	2.00	3.11	6.83	5.39	65.5	3.04	17.6	2.41
June	2.08	3.41	8.30	5.64	61.6	3.19	17.5	2.52
July	2.00	3.44	8.78	5.35	59.4	3.11	17.6	2.44
August	2.08	3.34	8.99	5.43	57.9	3.00	17.7	2.53
September	2.33	3.50	8.84	5.58	59.4	3.32	17.4	2.96
October	2.68	3.86	7.69	5.74	62.8	3.69	17.7	3.24
November	2.92	4.76	6.86	5.86	70.3	4.02	17.6	3.41
December	2.28	3.42	6.54	5.72	72.9	3.74	17.7	2.77
Annual Average	**2.32**	**3.66**	**6.94**	**5.80**	**70.8**	**3.59**	**18.1**	**2.78**
1998								
January	1.95	3.08	6.41	5.65	73.2	3.67	16.8	2.64
February	1.95	3.08	6.41	5.59	72.9	3.58	16.7	2.51
March	2.05	3.06	6.29	5.40	73.6	3.40	17.3	2.53
April	2.15	3.23	6.81	5.64	67.7	3.28	15.8	2.59
May	2.04	3.12	7.70	5.73	62.6	3.14	14.9	2.47
June	1.90	2.98	8.51	5.51	62.9	2.97	15.1	2.40
July	2.08	3.31	8.53	5.64	56.0	3.04	13.1	2.50
August	1.81	3.01	9.25	5.46	53.3	2.75	13.8	2.21
September	1.69	2.78	8.96	5.49	57.0	2.65	14.2	2.15
October	1.85	2.99	7.60	5.31	59.2	2.75	14.8	2.22
November	1.93	2.99	6.58	5.22	64.5	2.95	15.7	2.37
December	1.94	3.10	6.34	5.23	68.3	2.92	17.2	2.22
Annual Average	**1.94**	**3.07**	**6.82**	**5.48**	**67.0**	**3.14**	**16.1**	**2.40**
1999								
January	[E]1.80	2.84	5.97	5.08	72.2	3.07	15.4	2.25
February	[E]1.73	2.95	6.23	5.17	68.2	2.97	15.5	2.27
March	[E]1.70	2.67	6.00	5.00	67.9	2.77	16.7	2.11
April	[RE]1.81	2.91	6.32	5.70	63.3	2.79	15.8	2.25
May	[E]2.10	3.25	7.07	5.14	59.9	2.65	17.0	2.48
June	[E]2.10	3.20	7.91	5.23	57.1	2.64	18.0	2.47
July	[E]2.07	3.13	8.45	5.23	54.9	2.67	18.7	2.52
August	[RE]2.34	3.39	8.61	5.28	53.6	2.84	18.9	2.80
September	[E]2.42	3.50	8.38	5.40	58.1	3.09	17.0	[NA]
1999 YTD[c]	**[E]2.01**	**3.00**	**6.51**	**5.20**	**64.6**	**2.83**	**17.0**	**2.45**
1998 YTD[c]	**1.96**	**3.08**	**6.90**	**5.57**	**67.7**	**3.20**	**15.3**	**2.44**
1997 YTD[c]	**2.22**	**3.53**	**6.99**	**5.81**	**71.1**	**3.45**	**17.7**	**2.59**

[a] See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

[b] Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 25 for breakdown by State.

[c] Year-to-date price represents months for which price information is available in the current year.

[E] Estimated Data.

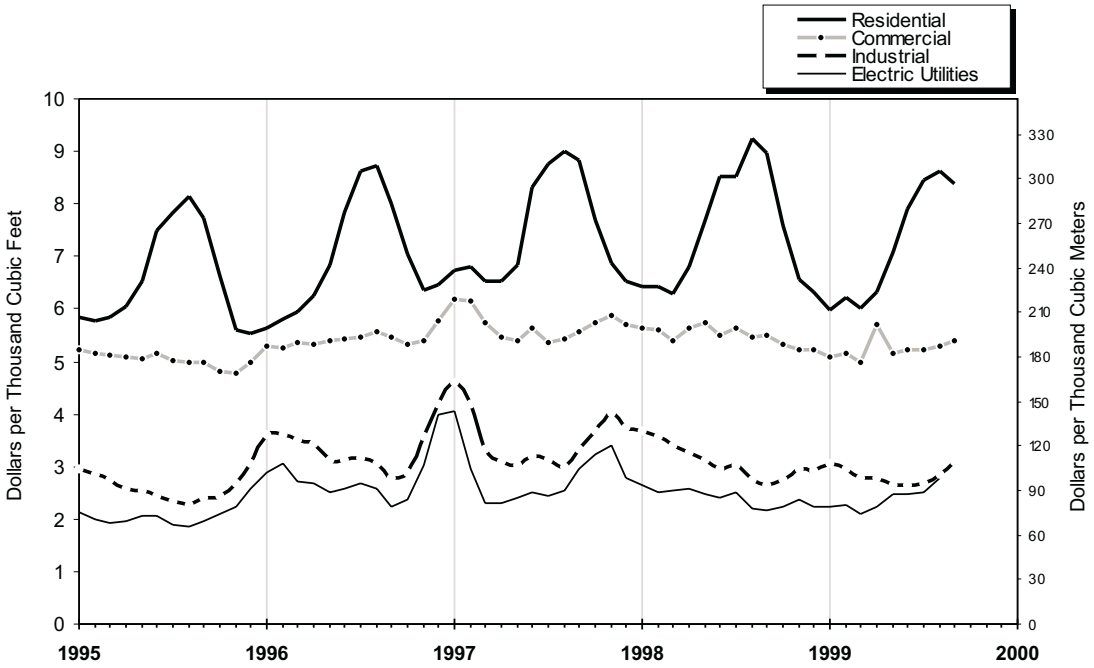
[RE] Revised Estimated Data.

[NA] Not Available.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

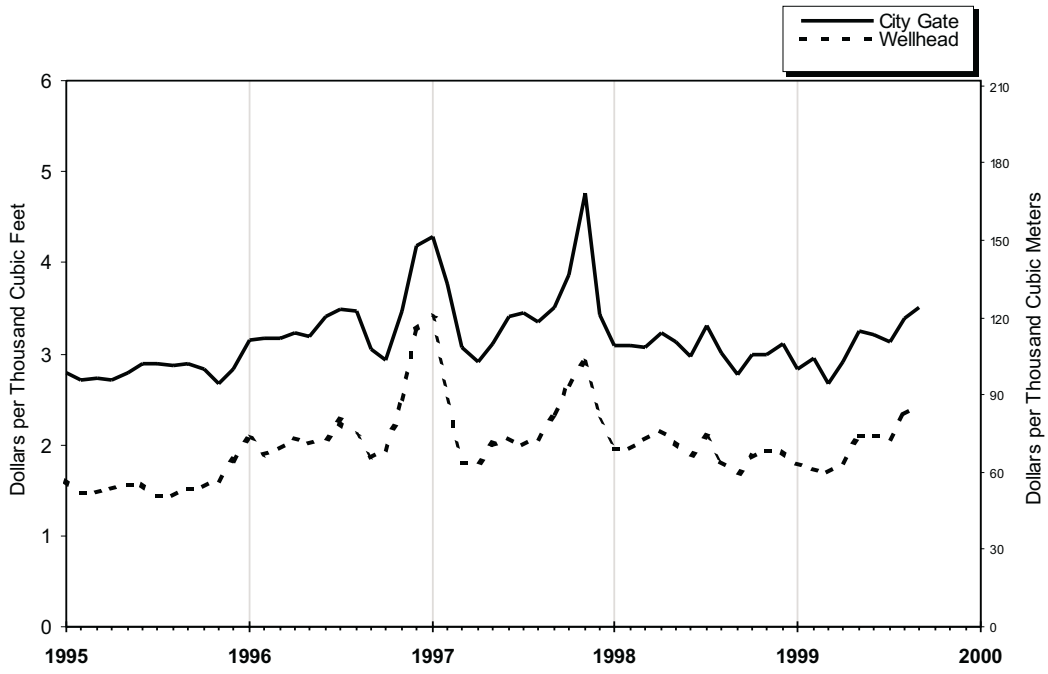
Sources: 1993-1998: Energy Information Administration (EIA) *Natural Gas Annual 1998*. 1999 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1998 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the U.S., 1995-1999



Source: Table 4

Figure 4. Average Price of Natural Gas in the United States, 1995-1999



Source: Table 4

Table 5

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG			
	Canada		Mexico		Algeria		Australia	
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price
1993 Total	**2,266,751**	**2.02**	**1,678**	**1.94**	**81,685**	**2.20**	**0**	—
1994 Total	**2,566,049**	**1.86**	**7,013**	**1.99**	**50,778**	**2.28**	**0**	—
1995 Total	**2,816,408**	**1.48**	**6,722**	**1.53**	**17,918**	**2.30**	**0**	—
1996 Total	**2,883,277**	**1.96**	**13,862**	**2.25**	**35,325**	**2.70**	**0**	—
1997								
January	266,756	3.27	1,555	3.09	7,560	2.78	0	—
February	230,352	2.50	2,526	2.49	7,667	3.00	0	—
March	251,328	1.70	3,127	1.83	2,530	2.98	0	—
April	235,431	1.66	189	1.92	2,557	2.23	0	—
May	234,345	1.81	2,380	2.03	2,552	2.20	2,455	2.68
June	225,366	1.87	1,692	2.20	5,059	2.49	0	—
July	229,479	1.82	1,088	1.98	5,026	2.48	0	—
August	237,142	1.81	6	2.35	7,535	2.43	0	—
September	232,090	2.00	29	2.47	5,030	2.41	2,337	2.88
October	245,742	2.32	965	2.92	5,050	2.70	0	—
November	257,782	2.71	1,874	2.82	7,542	2.89	4,893	3.07
December	253,338	2.17	1,810	2.12	7,567	2.88	0	—
Total	**2,899,152**	**2.15**	**17,243**	**2.31**	**65,675**	**2.67**	**9,686**	**2.92**
1998								
January	276,118	2.06	55	2.12	10,105	2.51	0	—
February	239,091	1.90	2,184	2.04	7,606	2.51	2,171	3.99
March	257,485	1.97	380	2.20	5,166	2.50	0	—
April	247,363	2.03	3,249	2.37	2,549	2.52	0	—
May	243,868	2.00	845	2.15	7,596	2.51	0	—
June	235,847	1.86	5	2.21	5,149	2.51	2,441	2.91
July	259,412	1.96	1,821	2.13	5,086	2.52	0	—
August	268,535	1.80	1,413	1.78	2,540	2.52	2,321	2.92
September	254,752	1.66	2,257	1.86	5,133	2.52	0	—
October	260,135	1.92	905	1.65	5,023	2.50	0	—
November	247,971	2.09	0	—	5,042	2.51	2,353	3.55
December	261,495	2.14	1,418	1.77	7,572	2.51	2,348	3.18
Total	**3,052,073**	**1.95**	**14,532**	**2.03**	**68,567**	**2.51**	**11,634**	**3.30**
1999								
January	290,266	1.98	4,891	1.76	12,612	2.47	0	—
February	258,656	1.89	4,398	1.71	7,423	2.51	2,557	3.56
March	279,161	1.82	751	1.61	12,648	2.70	0	—
April	265,973	1.84	4,192	2.04	7,639	2.46	0	—
May	270,034	2.17	6,843	1.97	3,900	2.67	0	—
June	256,251	2.13	4,978	2.14	2,528	1.96	2,314	2.34
July	271,431	NA	R3,876	NA	5,133	NA	0	—
August	287,657	NA	R6,028	NA	2,554	NA	2,302	NA
September	R283,625	NA	R4,643	NA	7,593	NA	0	—
October	E293,901	NA	E4,643	NA	5,120	NA	2,309	NA
1999 YTD	**E2,756,956**	NA	**E45,243**	NA	**67,149**	NA	**9,482**	NA
1998 YTD	**2,542,607**	**1.92**	**13,114**	**2.06**	**55,954**	**2.51**	**6,933**	**3.25**
1997 YTD	**2,388,032**	**2.09**	**13,558**	**2.27**	**50,567**	**2.61**	**4,793**	**2.78**

See footnotes at end of table.

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet) — Continued

Year and Month	LNG								Total	
	Qatar		Trinidad		United Arab Emirates		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1993 Total	**0**	—	**0**	—	**0**	—	**0**	—	**2,350,115**	**2.03**
1994 Total	**0**	—	**0**	—	**0**	—	**0**	—	**2,623,839**	**1.87**
1995 Total	**0**	—	**0**	—	**0**	—	**0**	—	**2,841,048**	**1.49**
1996 Total	**0**	—	**0**	—	**4,949**	**3.46**	**0**	—	**2,937,413**	**1.97**
1997										
January	0	—	0	—	2,417	3.74	0	—	278,288	3.26
February	0	—	0	—	0	—	0	—	240,545	2.52
March	0	—	0	—	0	—	0	—	256,985	1.72
April	0	—	0	—	0	—	0	—	238,178	1.67
May	0	—	0	—	0	—	0	—	241,732	1.83
June	0	—	0	—	0	—	0	—	232,118	1.88
July	0	—	0	—	0	—	0	—	235,593	1.84
August	0	—	0	—	0	—	0	—	244,684	1.83
September	0	—	0	—	0	—	0	—	239,486	2.01
October	0	—	0	—	0	—	0	—	251,758	2.33
November	0	—	0	—	0	—	0	—	272,091	2.72
December	0	—	0	—	0	—	0	—	262,716	2.19
Total	**0**	—	**0**	—	**2,417**	**3.74**	**0**	—	**2,994,173**	**2.17**
1998										
January	0	—	0	—	0	—	0	—	286,278	2.08
February	0	—	0	—	0	—	0	—	251,052	1.94
March	0	—	0	—	0	—	0	—	263,032	1.98
April	0	—	0	—	0	—	0	—	253,161	2.04
May	0	—	0	—	0	—	0	—	252,310	2.02
June	0	—	0	—	0	—	0	—	243,442	1.88
July	0	—	0	—	0	—	0	—	266,319	1.97
August	0	—	0	—	0	—	0	—	274,809	1.82
September	0	—	0	—	0	—	0	—	262,142	1.68
October	0	—	0	—	0	—	0	—	266,063	1.93
November	0	—	0	—	2,667	2.78	0	—	258,033	2.12
December	0	—	0	—	2,585	2.47	0	—	275,417	2.16
Total	**0**	—	**0**	—	**5,252**	**2.63**	**0**	—	**3,152,058**	**1.97**
1999										
January	0	—	0	—	0	—	0	—	307,769	2.00
February	2,481	2.75	0	—	0	—	0	—	275,515	1.93
March	0	—	0	—	0	—	0	—	292,560	1.86
April	2,492	1.93	0	—	0	—	0	—	280,296	1.86
May	0	—	5,493	1.90	0	—	0	—	286,270	2.17
June	2,417	1.98	6,620	2.08	0	—	0	—	275,109	2.13
July	2,388	NA	6,599	NA	0	—	0	—	R289,428	NA
August	0	—	9,898	NA	0	—	a2,576	NA	R311,014	NA
September	4,987	NA	4,393	NA	0	—	0	—	R305,242	NA
October	0	—	4,394	NA	0	—	0	—	E310,367	NA
1999 YTD	**14,766**	NA	**37,397**	NA	**0**	—	**2,576**	NA	E**2,933,569**	NA
1998 YTD	**0**	—	**0**	—	**0**	—	**0**	—	**2,618,608**	**1.93**
1997 YTD	**0**	—	**0**	—	**2,417**	**3.74**	**0**	—	**2,459,366**	**2.11**

[a] Received from Malaysia.
R Revised Data.
E Estimated Data.
NA Not Available.
— Not Applicable.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6

Table 6. U.S. Natural Gas Exports, by Country, 1993-1999

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Japan		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1993 Total	**44,518**	**2.14**	**39,676**	**2.02**	**55,989**	**3.34**	**0**	—	**140,183**	**2.59**
1994 Total	**52,556**	**2.42**	**46,500**	**1.68**	**62,682**	**3.18**	**0**	—	**161,738**	**2.50**
1995 Total	**27,554**	**1.96**	**61,283**	**1.50**	**65,283**	**3.41**	**0**	—	**154,119**	**2.39**
1996 Total	**51,905**	**2.67**	**33,840**	**2.11**	**67,648**	**3.65**	**0**	—	**153,393**	**2.97**
1997										
January	4,193	4.08	2,231	4.08	5,604	4.25	0	—	12,028	4.16
February	5,169	3.02	1,677	2.32	5,596	4.20	0	—	12,443	3.46
March	9,115	2.05	1,486	1.55	5,675	4.16	0	—	16,276	2.74
April	5,168	1.78	3,044	1.83	5,660	4.06	0	—	13,872	2.72
May	4,107	2.08	2,177	1.96	3,812	3.83	0	—	10,097	2.72
June	3,162	2.28	2,579	2.14	3,786	3.72	0	—	9,527	2.81
July	3,257	2.14	3,122	2.17	3,756	3.66	0	—	10,136	2.71
August	3,820	2.15	6,282	2.37	7,532	3.62	0	—	17,633	2.86
September	3,129	2.37	6,159	2.59	3,767	3.58	0	—	13,055	2.83
October	2,432	2.85	4,182	2.87	5,676	3.58	0	—	12,289	3.19
November	5,579	3.10	1,782	3.16	5,691	3.66	0	—	13,051	3.35
December	7,318	2.58	3,650	2.30	5,631	3.58	0	—	16,600	2.86
Total	**56,447**	**2.52**	**38,372**	**2.46**	**62,187**	**3.83**	**0**	—	**157,006**	**3.02**
1998										
January	4,930	2.53	4,257	2.11	7,446	3.67	0	—	16,632	2.93
February	4,502	2.11	3,117	2.06	3,726	3.42	0	—	11,346	2.53
March	7,851	2.25	4,202	2.14	7,435	3.09	0	—	19,488	2.55
April	4,509	2.47	2,675	2.23	5,702	2.81	0	—	12,886	2.57
May	2,083	2.28	6,119	2.12	1,891	2.70	0	—	10,093	2.26
June	1,938	2.03	5,617	1.98	5,695	2.69	0	—	13,250	2.29
July	1,634	1.97	3,852	2.20	5,679	2.70	0	—	11,166	2.42
August	52	1.87	4,834	1.95	5,676	2.70	1	5.88	10,563	2.35
September	1,481	2.09	2,892	1.81	7,584	2.68	0	—	11,957	2.40
October	2,127	2.03	5,167	1.90	5,679	2.72	3	5.74	12,975	2.28
November	3,630	2.17	5,079	2.00	3,776	2.75	9	5.69	12,494	2.28
December	5,152	2.26	5,323	1.99	5,662	2.73	20	5.68	16,157	2.34
Total	**39,891**	**2.25**	**53,133**	**2.04**	**65,951**	**2.91**	**33**	**5.69**	**159,007**	**2.45**
1999										
January	2,373	1.91	4,526	1.83	5,587	2.61	24	7.48	12,510	2.20
February	3,360	1.94	4,753	1.74	5,563	2.49	28	7.46	13,704	2.11
March	4,883	1.80	5,950	1.64	5,570	2.75	22	7.41	16,425	2.07
April	2,300	1.79	5,049	1.89	5,699	2.48	19	7.23	13,067	2.14
May	2,512	2.26	6,109	2.29	5,586	2.70	24	7.47	14,231	2.45
June	2,255	2.16	5,278	2.32	3,723	2.41	19	7.34	11,275	2.33
July	R2,347	NA	R5,613	NA	5,675	NA	R19	NA	R13,654	NA
August	R2,419	NA	R5,400	NA	5,628	NA	R19	NA	R13,466	NA
September	R2,301	NA	R5,267	NA	5,604	NA	R22	NA	R13,194	NA
October	E2,301	NA	E5,267	NA	3,723	NA	NA	NA	E11,291	NA
1999 YTD	**E27,051**	**NA**	**E53,212**	**NA**	**52,358**	**NA**	**NA**	**NA**	**E132,817**	**NA**
1998 YTD	**31,108**	**2.26**	**42,731**	**2.05**	**56,514**	**2.94**	**3**	**5.77**	**130,356**	**2.48**
1997 YTD	**43,550**	**2.43**	**32,939**	**2.44**	**50,865**	**3.88**	**0**	—	**127,355**	**3.01**

R Revised Data.
E Estimated Data.
NA Not Available.
— Not Applicable.

Sources: 1993-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet)

Year and Month	Alabama[b]	Alaska	Arizona	California	Colorado	Florida	Kansas
1993 Total	**388,024**	**430,350**	**597**	**315,851**	**400,985**	**7,085**	**686,347**
1994 Total	**515,272**	**555,402**	**752**	**309,427**	**453,207**	**7,486**	**712,730**
1995 Total	**519,661**	**469,550**	**558**	**279,555**	**523,084**	**6,463**	**721,436**
1996 Total	**530,841**	**480,828**	**463**	**286,494**	**572,071**	**6,006**	**712,796**
1997							
January	48,213	43,497	46	24,430	52,755	527	60,198
February	46,024	39,391	41	21,876	48,424	512	55,275
March	51,313	42,625	42	23,910	53,954	610	60,099
April	51,246	38,687	39	23,248	52,529	554	58,357
May	48,802	35,427	36	23,590	52,376	541	61,661
June	47,342	36,344	28	22,928	50,715	450	59,996
July	46,370	36,284	31	23,981	52,964	514	58,234
August	46,314	36,270	30	23,841	54,041	505	61,937
September	48,911	37,041	30	23,760	52,742	519	49,658
October	50,634	40,095	34	24,437	54,260	452	53,815
November	49,734	39,631	57	24,792	55,549	439	54,152
December	48,368	43,020	39	24,896	57,064	491	53,834
Total	**583,272**	**468,311**	**452**	**285,690**	**637,375**	**6,114**	**687,215**
1998							
January	46,466	43,382	43	24,752	57,511	503	53,032
February	41,653	39,244	42	22,151	52,954	491	48,698
March	46,476	42,479	53	22,708	58,795	592	52,948
April	46,281	38,540	43	21,952	57,586	531	51,415
May	48,978	35,281	38	23,894	57,916	513	54,334
June	49,638	36,217	34	24,871	55,989	426	52,862
July	50,131	36,171	42	27,157	57,737	486	51,324
August	49,215	36,118	36	29,727	58,584	472	54,059
September	42,308	36,884	32	29,114	57,005	498	43,419
October	47,503	39,958	31	30,467	60,868	423	47,058
November	46,682	39,483	33	29,508	59,592	401	47,359
December	48,447	42,890	33	28,974	61,783	459	47,078
Total	**563,779**	**466,648**	**457**	**315,277**	**696,321**	**5,796**	**603,586**
1999							
January	[R]32,042	43,848	31	29,268	[E]67,301	517	41,599
February	[R]29,023	39,443	27	26,541	[E]62,221	448	43,103
March	[R]31,836	42,685	36	30,361	[E]68,086	494	43,887
April	[R]28,413	[E]37,537	38	29,808	[E]66,011	459	[E]42,533
May	[R]33,517	[E]33,279	41	30,944	[E]66,741	[R]427	[E]44,437
June	[R]32,295	[E]35,853	45	28,553	[E]64,410	[R]392	[E]42,228
July	[R]32,356	[E]36,229	60	30,744	[E]66,424	[RE]382	[E]41,575
August	[E]32,253	[E]34,645	51	31,632	[E]69,632	[E]407	[E]42,743
1999 YTD	**[E]251,736**	**[E]303,518**	**329**	**237,852**	**[E]530,826**	**[E]3,524**	**[E]342,105**
1998 YTD	**378,838**	**307,433**	**329**	**197,215**	**457,073**	**4,015**	**418,672**
1997 YTD	**385,625**	**308,525**	**293**	**187,805**	**417,759**	**4,213**	**475,757**

See footnotes at end of table.

Table 7

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Louisiana[b]	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1993 Total	**4,991,138**	**204,635**	**80,695**	**54,528**	**1,409,429**	**59,851**	**2,049,942**
1994 Total	**5,169,705**	**222,657**	**63,448**	**50,416**	**1,557,689**	**57,805**	**1,934,864**
1995 Total	**5,108,366**	**238,203**	**95,533**	**50,264**	**1,625,837**	**49,468**	**1,811,734**
1996 Total	**5,289,742**	**245,740**	**103,263**	**50,996**	**1,554,087**	**49,674**	**1,734,887**
1997							
January	445,257	34,940	8,253	4,654	135,263	3,952	144,608
February	405,366	16,875	7,807	4,451	122,656	3,899	134,455
March	447,802	24,790	8,470	4,836	137,830	4,453	147,098
April	431,010	12,944	8,120	4,654	132,438	4,364	136,246
May	443,269	39,819	8,611	4,561	136,553	4,539	142,336
June	425,934	19,314	8,893	3,808	125,256	4,348	138,038
July	434,326	40,026	8,636	4,114	131,806	4,427	144,769
August	438,965	18,597	9,626	4,213	134,140	4,486	147,528
September	430,599	22,451	9,162	4,199	128,915	4,381	150,488
October	445,702	20,297	10,084	3,150	134,623	4,508	145,054
November	434,908	26,013	9,683	4,706	120,856	4,416	135,537
December	446,682	29,885	9,955	5,091	118,298	4,629	137,731
Total	**5,229,821**	**305,950**	**107,300**	**52,437**	**1,558,633**	**52,401**	**1,703,888**
1998							
January	453,867	28,460	9,639	4,831	130,265	4,623	158,897
February	409,480	8,278	8,574	4,569	118,164	4,039	126,200
March	459,364	30,780	9,781	4,892	132,729	4,344	136,334
April	452,863	17,823	8,957	4,683	127,544	4,311	134,115
May	471,279	29,198	9,121	4,978	131,488	4,529	140,400
June	451,104	26,958	8,586	4,448	120,632	4,304	136,013
July	454,637	26,171	9,258	4,636	126,924	4,460	134,510
August	457,279	18,896	8,834	4,594	129,164	4,546	139,914
September	363,707	28,491	8,664	4,750	124,152	4,435	134,805
October	433,764	21,816	8,868	5,040	129,640	4,610	138,167
November	431,629	12,013	8,602	5,044	116,404	4,465	134,583
December	448,896	29,193	9,184	5,182	113,991	4,520	130,592
Total	**5,287,870**	**278,076**	**108,068**	**57,645**	**1,501,098**	**53,185**	**1,644,531**
1999							
January	[E]466,143	20,853	9,154	[E]4,947	134,745	4,331	[E]144,408
February	425,121	8,746	8,678	[E]4,700	134,071	3,858	[E]122,928
March	463,776	39,892	9,933	[E]5,002	134,084	4,220	[E]133,354
April	450,953	22,653	9,426	[E]4,749	134,098	4,298	[E]131,587
May	474,329	25,273	9,708	[E]4,894	[E]139,031	4,335	[E]139,036
June	[E]464,118	25,120	9,480	[E]4,118	[E]129,008	4,329	[E]133,557
July	468,257	24,043	9,542	[E]4,340	[E]131,149	4,570	[E]132,444
August	468,679	19,291	9,406	[E]4,552	[E]133,319	4,540	[E]133,202
1999 YTD	**[E]3,681,376**	**185,872**	**75,326**	**[E]37,301**	**[E]1,069,505**	**34,480**	**[E]1,070,516**
1998 YTD	**3,609,873**	**186,563**	**72,750**	**37,629**	**1,016,910**	**35,156**	**1,106,383**
1997 YTD	**3,471,929**	**207,304**	**68,416**	**35,292**	**1,055,942**	**34,468**	**1,135,078**

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas[c]	Utah	Wyoming	Other[a] States	U.S. Total
1993 Total	**4,003**	**6,249,624**	**225,401**	**634,957**	**788,472**	**18,981,915**
1994 Total	**3,221**	**6,353,844**	**270,858**	**696,018**	**774,724**	**19,709,525**
1995 Total	**1,923**	**6,330,048**	**241,290**	**673,775**	**759,728**	**19,506,474**
1996 Total	**1,439**	**6,470,620**	**250,767**	**666,036**	**805,491**	**19,812,241**
1997						
January	105	554,934	21,782	59,016	66,589	1,709,020
February	98	506,768	19,115	55,848	59,659	1,548,536
March	101	564,269	21,912	61,159	64,046	1,719,319
April	102	539,499	19,570	64,278	60,894	1,638,779
May	102	552,230	22,053	62,726	62,075	1,701,306
June	97	529,765	19,815	59,667	58,840	1,611,580
July	98	546,610	21,711	60,324	58,719	1,673,945
August	99	548,267	21,024	61,091	59,919	1,670,894
September	86	525,836	22,007	64,678	57,035	1,632,496
October	97	540,150	23,006	64,992	63,152	1,678,542
November	91	519,274	22,840	62,181	61,087	1,625,944
December	96	526,271	22,307	62,410	64,665	1,655,732
Total	**1,173**	**6,453,873**	**257,139**	**738,368**	**736,679**	**19,866,093**
1998						
January	90	550,623	21,826	66,238	64,219	1,719,267
February	79	497,583	21,758	59,825	56,464	1,520,246
March	96	548,845	23,656	64,659	60,395	1,699,925
April	92	531,219	23,513	61,338	57,355	1,640,161
May	92	545,368	24,967	65,642	57,484	1,705,500
June	90	522,691	23,968	59,655	55,586	1,634,073
July	95	536,998	23,036	63,534	58,630	1,665,937
August	94	542,707	23,681	63,228	56,789	1,677,936
September	90	507,526	21,554	63,059	56,609	1,527,103
October	83	529,662	23,830	65,994	61,915	1,649,698
November	85	509,919	23,045	64,618	57,038	1,590,505
December	80	495,612	22,507	63,523	62,259	1,615,203
Total	**1,067**	**6,318,754**	**277,340**	**761,313**	**704,742**	**19,645,554**
1999						
January	83	542,129	23,467	62,582	[E]60,348	[RE]1,687,796
February	84	490,865	21,141	55,832	[E]55,142	[RE]1,531,973
March	120	534,240	23,878	67,624	[E]59,456	[RE]1,692,962
April	111	507,927	22,076	61,885	[E]55,351	[RE]1,609,913
May	113	526,518	[E]23,166	64,838	[E]56,407	[RE]1,677,033
June	111	501,865	[E]21,948	63,028	[E]53,875	[RE]1,614,332
July	110	521,504	22,771	66,127	[E]55,164	[RE]1,647,791
August	74	517,063	[E]22,955	58,535	[E]55,466	[E]1,638,445
1999 YTD	**805**	**4,142,111**	**[E]181,403**	**500,451**	**[E]451,210**	**[E]13,100,245**
1998 YTD	**728**	**4,276,035**	**186,404**	**504,118**	**466,921**	**13,263,045**
1997 YTD	**803**	**4,342,342**	**166,980**	**484,108**	**490,741**	**13,273,380**

[a] Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1998 monthly values for these States are estimated.

[b] All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisana and Alabama portions of Federal Offshore production.

[c] Federal offshore production volumes are included.

[R] Revised Data.

[E] Estimated Data.

[RE] Revised Estimated Data.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1992-1998: Energy Information Administration (EIA), *Natural Gas Annual 1998*.1999 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, August 1999

(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	E34,924	E574	E35,498	E1,117	E2,035	E93	E32,253
Alaska	E13,672	E232,885	E246,557	E211,452	0	E460	E34,645
Arizona	51	0	51	0	0	0	51
California	7,554	28,273	35,827	3,945	168	82	31,632
Colorado	E60,909	E9,399	E70,307	E600	0	E75	E69,632
Florida	0	E460	E460	0	E53	0	E407
Kansas	E39,430	E3,429	E42,859	E73	0	E43	E42,743
Louisiana	E412,434	E62,001	E474,435	E3,721	0	E2,035	468,679
Michigan	15,701	3,925	19,626	138	0	196	19,291
Mississippi	10,241	433	10,674	521	516	231	9,406
Montana	E4,010	E547	E4,557	E5	0	0	E4,552
New Mexico	E125,843	E21,814	E147,658	E899	E13,201	E240	E133,319
North Dakota	1,374	3,480	4,855	0	8	307	4,540
Oklahoma	E120,167	E13,035	133,202	0	0	0	E133,202
Oregon	91	0	91	4	13	0	74
Texas	458,459	110,934	569,393	36,848	13,087	2,396	517,063
Utah	E20,872	E3,320	E24,192	E40	0	E1,197	E22,955
Wyoming	90,272	4,701	94,973	11,507	12,457	12,474	58,535
Other States	E53,128	E2,835	E55,964	E92	E321	E85	E55,466
Total	**E1,469,133**	**E502,045**	**E1,971,178**	**E270,962**	**E41,858**	**E19,913**	**E1,638,445**

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

E Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1993-1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals[c]
1993 Total[a]	**4,327**	**2,322**	**6,649**	**-275**	**-10.6**	**2,760**	**2,717**	**-43**
1994 Total[a]	**4,360**	**2,606**	**6,966**	**284**	**12.2**	**2,796**	**2,508**	**-288**
1995 Total[a]	**4,349**	**2,153**	**6,503**	**-453**	**3.1**	**2,566**	**2,974**	**408**
1996 Total[a]	**4,341**	**2,173**	**6,513**	**19**	**0.9**	**2,906**	**2,911**	**6**
1997								
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
Total	—	—	—	—	—	**2,800**	**2,824**	**24**
1998								
January	4,347	1,712	6,060	215	14.5	69	538	468
February	4,342	1,426	5,768	286	25.2	75	365	291
March	4,342	1,183	5,524	192	19.4	136	382	246
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
Total	—	—	—	—	—	**2,905**	**2,379**	**-526**
1999								
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	[d]4,361	[d]1,430	5,792	246	20.7	84	381	297
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
November(STIFS)	[E]4,360	[RE]2,989	[RE]7,349	[RE]-166	[RE]-5.3	NA	NA	[E]37
December(STIFS)	[E]4,360	[E]2,464	[E]6,824	[E]-265	[E]-9.7	NA	NA	[E]525
Total	—	—	—	—	—	NA	NA	**159**

[a] Total as of December 31.

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; 1997 - 8,128; and 1998 - 8,179.

[c] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[d] Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.

[E] Estimated Data.

[RE] Revised Estimated Data.

NA Not Available.

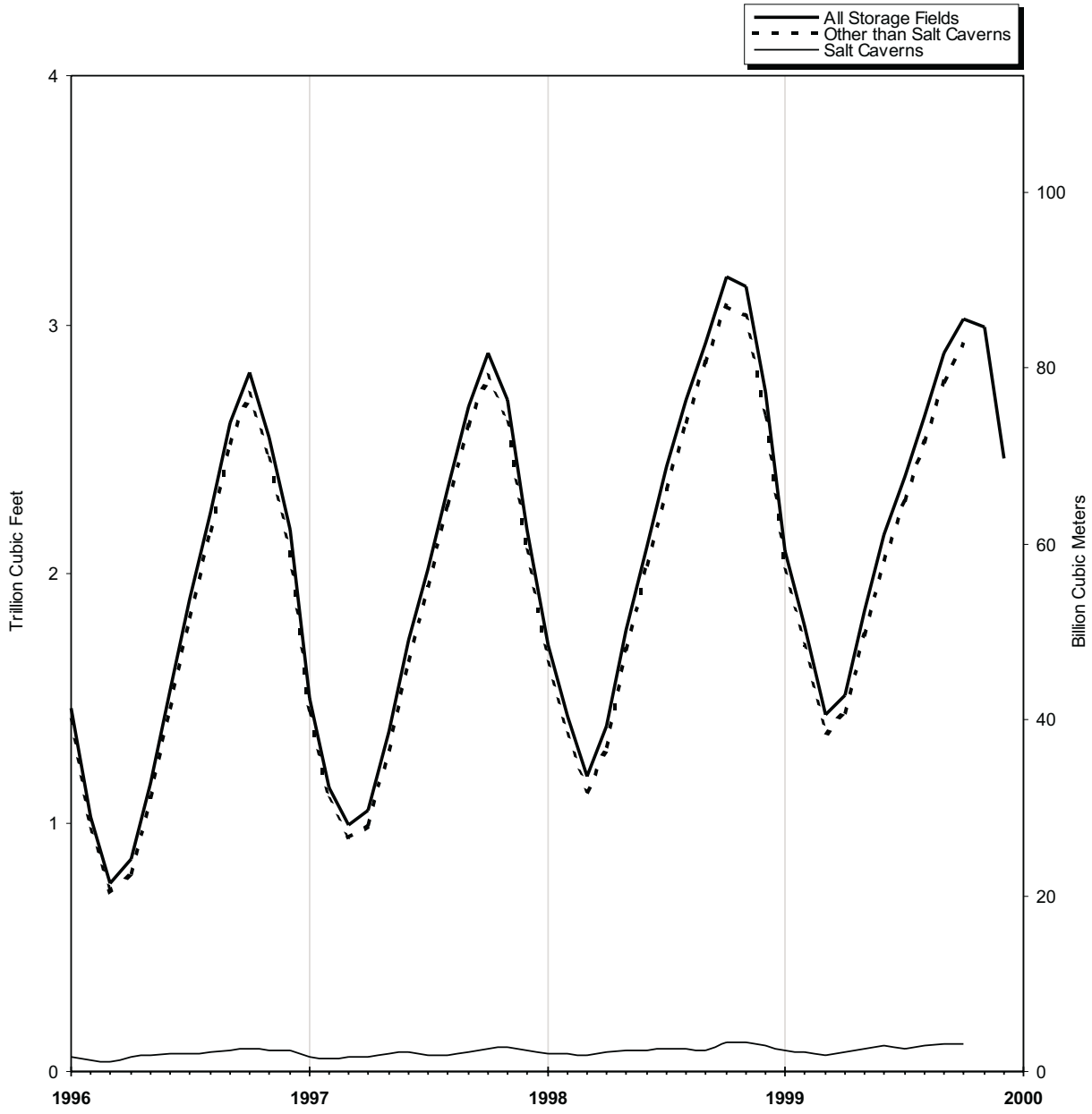
— Not Applicable.

Notes: Data for 1993 through 1998 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report, "Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5

Figure 5. Working Gas in Underground Natural Gas Storage in the U.S., 1996-1999



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1997-2000

(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals[a]
March 1997	4,345	990	5,336	232	30.7	131	285	155
1997 Refill Season								
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
Total	—	—	—	—	—	**2,388**	**492**	**-1,896**
1997-1998 Heating Season								
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
January	4,347	1,712	6,060	215	14.5	69	538	468
February	4,342	1,426	5,768	286	25.2	75	365	291
March	4,342	1,183	5,524	192	19.4	136	382	246
Total	—	—	—	—	—	**438**	**2,165**	**1,727**
1998 Refill Season								
April	4,339	1,386	5,725	334	31.9	280	80	-200
May	4,341	1,774	6,114	407	29.9	433	42	-391
June	4,335	2,114	6,449	381	22.1	379	52	-327
July	4,378	2,428	6,806	409	20.4	371	54	-317
August	4,340	2,698	7,038	358	15.4	336	58	-278
September	4,341	2,928	7,269	253	9.6	298	74	-224
October	4,342	3,191	7,533	302	10.6	308	46	-262
Total	—	—	—	—	—	**2,405**	**407**	**-1,998**
1998-1999 Heating Season								
November	4,344	3,155	7,499	453	16.9	137	168	31
December	4,326	2,730	7,056	554	25.5	83	519	436
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	[b]4,361	[b]1,430	5,792	246	20.7	84	381	297
Total	—	—	—	—	—	**422**	**2,141**	**1,719**
1999 Refill Season								
April	4,355	1,514	5,869	131	9.5	203	112	-91
May	4,346	1,847	6,192	72	4.0	380	43	-337
June	4,344	2,157	6,501	54	2.6	345	40	-306
July	4,350	2,390	6,740	-27	-1.1	303	78	-225
August	4,342	2,632	6,974	-66	-2.4	309	70	-238
September	4,360	2,884	7,245	-43	-1.5	352	42	-310
October	4,360	3,026	7,386	-165	-5.2	238	90	-148
Total	—	—	—	—	—	[R]**2,130**	[R]**474**	[R]**-1,656**
1999-2000 Heating Season								
November(STIFS)	[E]4,360	[RE]2,989	[RE]7,349	[RE]-166	[RE]-5.3	NA	NA	[E]37
December(STIFS)	[E]4,360	[E]2,464	[E]6,824	[E]-265	[E]-9.7	NA	NA	[E]525

[a] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[b] Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.

[R] Revised Data.

[E] Estimated Data.

[RE] Revised Estimated Data.

NA Not Available.

— Not Applicable.

Notes: Data for 1997 and 1998 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994 - 1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total[c]	**44**	**70**	**113**	—	—	**142**	**123**	**-19**
1995 Total[c]	**60**	**72**	**131**	**2**	**2.9**	**194**	**200**	**5**
1996 Total[c]	**64**	**85**	**149**	**14**	**18.8**	**258**	**246**	**-13**
1997								
January	65	57	122	-2	-3.1	21	51	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	22	19	-2
May	65	73	138	10	17.3	27	13	-14
June	66	80	145	8	11.7	22	16	-7
July	65	66	131	-6	-7.5	15	30	15
August	65	67	132	-11	-12.4	23	22	0
September	65	78	143	-9	-8.7	27	14	-12
October	66	93	159	4	5.6	30	14	-16
November	67	95	162	7	9.4	25	24	-2
December	67	83	150	-4	-3.0	19	31	12
Total	—	—	—	—	—	**267**	**274**	**6**
1998								
January	67	69	136	10	21.6	18	31	13
February	66	69	135	18	39.1	18	21	3
March	68	64	131	8	13.8	23	29	6
April	68	80	149	22	38.7	30	12	-18
May	68	83	151	9	12.9	26	23	-3
June	66	83	149	3	4.1	21	23	2
July	66	91	157	25	38.0	26	18	-8
August	66	92	158	25	38.8	24	22	-2
September	67	83	151	5	7.4	24	33	9
October	67	116	183	22	24.4	45	12	-33
November	68	119	186	23	24.5	23	18	-5
December	67	104	171	21	26.0	18	33	15
Total	—	—	—	—	—	**297**	**275**	**-22**
1999								
January	69	84	153	14	19.6	19	41	22
February	67	77	144	10	14.3	15	20	5
March	67	68	135	4	6.0	18	26	8
April	67	77	144	-3	-3.8	27	18	-9
May	67	94	161	11	13.4	29	12	-17
June	65	102	167	19	22.6	21	15	-6
July	65	94	160	3	3.0	16	24	8
August	66	102	168	9	9.6	22	14	-8
September	66	113	179	29	35.0	23	13	-10
October	67	114	181	-1	-1.2	21	19	-1

[c] Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-1999

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1994 Total[c]	**4,317**	**2,536**	**6,853**	—	—	**2,654**	**2,385**	**-269**
1995 Total[c]	**4,290**	**2,082**	**6,371**	**-455**	**-17.9**	**2,372**	**2,774**	**403**
1996 Total[c]	**4,277**	**2,087**	**6,364**	**6**	**0.3**	**2,647**	**2,665**	**18**
1997								
January	4,282	1,439	5,721	34	2.5	47	702	654
February	4,283	1,090	5,372	116	12.0	40	390	350
March	4,280	935	5,215	214	29.8	109	269	160
April	4,277	993	5,270	195	24.6	184	127	-56
May	4,275	1,292	5,566	191	17.6	335	28	-307
June	4,291	1,651	5,942	194	13.3	385	26	-358
July	4,290	1,951	6,241	124	6.8	346	49	-297
August	4,291	2,271	6,563	103	4.7	356	34	-322
September	4,295	2,595	6,890	75	3.0	353	29	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,292	2,604	6,896	142	5.8	88	278	191
December	4,283	2,092	6,375	4	0.2	27	548	521
Total	—	—	—	—	—	**2,533**	**2,551**	**18**
1998								
January	4,281	1,643	5,923	203	14.2	51	507	456
February	4,276	1,357	5,633	267	24.5	57	344	287
March	4,274	1,119	5,393	184	19.8	113	353	240
April	4,271	1,306	5,576	312	31.5	250	68	-182
May	4,272	1,691	5,963	398	30.9	407	20	-387
June	4,269	2,030	6,300	378	23.0	358	29	-329
July	4,312	2,337	6,649	385	19.8	345	36	-309
August	4,274	2,606	6,880	332	14.7	312	37	-275
September	4,273	2,844	7,118	247	9.6	274	41	-233
October	4,275	3,076	7,350	280	10.1	263	34	-229
November	4,276	3,036	7,313	430	16.6	114	150	36
December	4,259	2,626	6,884	532	25.5	64	485	421
Total	—	—	—	—	—	**2,608**	**2,103**	**-504**
1999								
January	4,257	2,010	6,268	367	22.4	37	638	601
February	4,245	1,714	5,960	363	26.8	47	375	328
March	4,294	1,363	5,657	242	21.6	67	355	289
April	4,288	1,437	5,725	134	10.3	175	94	-81
May	4,279	1,753	6,031	61	3.6	351	31	-320
June	4,279	2,055	6,333	35	1.7	324	24	-300
July	4,285	2,296	6,581	-30	-1.3	287	54	-233
August	4,276	2,530	6,806	-75	-2.9	287	56	-231
September	4,294	2,772	7,066	-73	-2.5	329	29	-300
October	4,293	2,912	7,205	-164	-5.3	217	70	-147

[c] Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 1998 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet)

State	1999						
	October	September	August	July	June	May	April
Alabama	77	-402	-81	-235	-210	-471	-137
Arkansas	-219	-237	-901	-1,116	-1,086	-1,045	-667
California	-4,840	-9,773	2,919	-11,199	-20,737	-27,111	-911
Colorado	-2,419	-4,873	-5,436	-6,692	-5,526	-307	8,881
Illinois	-28,933	-38,601	-30,924	-23,880	-24,188	-27,851	7,599
Indiana	-3,753	-4,225	-2,797	-1,681	-1,625	-758	921
Iowa	-10,941	-13,108	-12,914	-10,783	-6,837	-4,596	86
Kansas	-1,014	-14,496	-9,796	-3,006	-17,080	-12,144	5,085
Kentucky	-1,117	-10,052	-1,241	-3,773	-10,131	-8,328	-2,297
Louisiana	-12,129	-32,350	-3,569	-3,546	-19,988	-22,324	-16,632
Maryland	-3,376	-1,411	-1,954	1,324	93	-2,551	-667
Michigan	-21,286	-45,478	-50,880	-51,556	-51,441	-49,536	-23,148
Minnesota	-175	-272	-250	-308	-172	0	214
Mississippi	1,133	-2,086	-1,088	852	-3,642	-5,105	-2,240
Missouri	-205	-408	-64	6	6	-697	-27
Montana	519	-1,472	-2,542	-1,794	-1,784	-568	1,329
Nebraska	-477	-1,732	-1,004	478	-697	-701	1,168
New Mexico	-260	-2,232	-841	-172	-443	-1,371	1,025
New York	-938	-5,725	-6,853	-5,915	-6,909	-9,935	-5,300
Ohio	-9,284	-25,111	-27,587	-27,798	-27,954	-33,732	-5,317
Oklahoma	-11,483	-15,540	-1,222	-748	-9,556	-14,068	-8,791
Oregon	0	-1,542	-1,313	-2,114	-2,013	168	735
Pennsylvania	-19,002	-41,487	-37,841	-27,925	-36,090	-44,102	-24,525
Tennessee	-57	-105	-104	-76	-107	-143	3
Texas	-11,096	-10,532	-7,923	-6,519	-21,602	-30,819	-15,510
Utah	-1,889	-4,860	-4,582	-7,489	-5,915	-3,772	1,667
Virginia	-110	-418	-207	-209	-211	-273	-184
Washington	-1,402	-402	-2,951	-3,595	-1,765	-786	1,852
West Virginia	-3,299	-20,378	-22,999	-23,517	-26,426	-32,000	-13,958
Wyoming	-306	-1,030	-1,371	-2,294	-1,661	-2,132	-990
AGA Regions							
Producing	-35,067	-77,473	-25,340	-14,255	-73,397	-86,875	-37,730
Eastern Consuming	-102,700	-208,641	-197,450	-175,542	-192,727	-215,674	-65,782
Western Consuming	-10,511	-24,223	-15,526	-35,485	-39,575	-34,509	12,778
Total	**-148,279**	**-310,337**	**-238,316**	**-225,282**	**-305,699**	**-337,059**	**-90,735**

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1999			1998			
	March	February	January	Total	December	November	October
Alabama	312	114	813	-447	139	-1	-613
Arkansas	690	1,049	2,066	-1,774	1,245	63	-580
California	9,782	18,491	23,789	-40,969	30,486	-14,022	-23,861
Colorado	3,319	3,684	3,990	-5,072	7,324	-1,757	-2,045
Illinois	27,580	41,907	56,407	-9,780	42,407	9,311	-30,361
Indiana	3,622	2,942	5,558	-921	4,063	-2,296	-2,901
Iowa	5,170	11,814	20,553	-2,954	20,920	-178	-7,251
Kansas	13,977	9,273	22,470	-18,691	14,533	3,580	-8,545
Kentucky	6,081	7,825	12,241	-11,700	10,352	1,731	-5,424
Louisiana	10,263	15,966	43,591	-82,860	38,463	1,355	-36,341
Maryland	1,208	1,982	3,399	-876	1,882	29	-1,312
Michigan	53,123	57,189	112,276	-74,840	60,982	18,759	-27,000
Minnesota	167	238	287	372	438	-84	-187
Mississippi	6,840	3,303	9,981	-10,185	5,464	702	-10,304
Missouri	150	343	170	173	573	-204	-208
Montana	2,410	3,375	4,860	-400	3,962	2,606	-1,532
Nebraska	1,338	442	698	1,466	1,336	625	-308
New Mexico	943	83	1,364	-6,479	-619	-1,243	-1,903
New York	10,688	10,057	15,534	-10,656	6,889	1,047	-4,424
Ohio	33,698	33,362	53,448	-26,672	35,491	7,882	-12,789
Oklahoma	8,079	-881	31,284	-48,008	24,711	106	-19,358
Oregon	1,185	1,717	1,979	-1,278	1,329	49	9
Pennsylvania	44,023	50,445	83,851	-40,009	46,685	858	-20,516
Tennessee	80	131	130	-62	131	-2	-103
Texas	14,152	9,654	43,297	-102,117	36,724	-2,512	-34,274
Utah	5,738	6,185	10,569	676	6,533	2,087	-1,821
Virginia	325	449	317	-510	371	47	-204
Washington	1,113	3,144	603	-539	3,223	-732	718
West Virginia	30,271	36,278	53,983	-28,267	27,238	3,983	-6,935
Wyoming	352	2,050	3,464	-2,719	2,677	-590	-1,425
AGA Regions							
Producing	54,944	38,447	154,055	-270,114	120,522	2,052	-111,305
Eastern Consuming	217,668	255,282	419,379	-206,056	259,459	41,592	-120,349
Western Consuming	24,066	38,885	49,540	-49,929	55,973	-12,444	-30,145
Total	**296,678**	**332,615**	**622,974**	**-526,099**	**435,953**	**31,200**	**-261,799**

See footnotes at end of table.

Table 13

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998						
	September	August	July	June	May	April	March
Alabama	401	-200	9	-623	-144	-245	248
Arkansas	-817	-1,005	-1,034	-1,100	-1,046	-471	1,039
California	-5,931	-7,171	-9,351	-27,432	-29,142	-10,607	-2,021
Colorado	-5,894	-5,866	-4,055	-3,907	-6,024	3,583	3,844
Illinois	-39,382	-32,631	-25,975	-32,534	-25,812	-559	28,954
Indiana	-4,532	-4,058	-2,987	-519	-483	929	4,371
Iowa	-12,282	-10,097	-14,097	-8,440	-3,579	387	6,794
Kansas	-9,036	-11,957	-12,830	-6,032	-18,906	-6,791	14,242
Kentucky	-4,214	-7,859	-11,061	-8,191	-11,810	-2,512	7,813
Louisiana	-9,007	-20,195	-25,554	-14,745	-22,813	-23,161	7,319
Maryland	-809	-1,413	-2,954	-1,266	-816	-1,138	1,464
Michigan	-30,308	-52,147	-60,115	-69,950	-69,619	-31,658	55,729
Minnesota	-275	-284	-289	-169	0	159	416
Mississippi	268	-4,119	-6,008	-2,924	-3,418	-3,682	2,243
Missouri	-414	-203	8	143	-460	48	423
Montana	-4,239	-4,524	-2,294	-2,024	-2,570	224	3,017
Nebraska	-778	-524	-727	-422	-773	860	1,261
New Mexico	-470	-919	-429	-180	-1,120	287	658
New York	-5,650	-5,731	-7,931	-8,569	-11,697	-4,090	8,738
Ohio	-19,356	-27,403	-31,408	-26,039	-36,194	-14,843	28,785
Oklahoma	-12,262	-7,283	-7,570	-12,648	-23,402	-19,472	7,174
Oregon	-1,141	-1,143	-1,188	-1,968	0	80	923
Pennsylvania	-28,003	-19,997	-33,256	-39,947	-58,295	-34,442	39,608
Tennessee	-102	-112	-134	0	0	0	83
Texas	-4,692	-12,193	-20,397	-20,094	-27,224	-40,175	-8,935
Utah	-3,970	-3,554	-3,497	-3,938	-3,543	267	1,430
Virginia	-244	-322	-185	-296	-304	-203	322
Washington	-1,825	-3,645	-313	-2,967	-3,938	1,542	3,328
West Virginia	-16,431	-29,122	-28,626	-26,455	-26,087	-14,668	23,897
Wyoming	-2,614	-2,007	-2,807	-3,398	-1,332	116	2,499
AGA Regions							
Producing	-36,017	-57,671	-73,822	-57,723	-97,929	-93,466	23,740
Eastern Consuming	-162,103	-191,819	-219,439	-223,109	-246,072	-102,134	208,491
Western Consuming	-25,888	-28,194	-23,795	-45,804	-46,550	-4,634	13,435
Total	**-224,007**	**-277,684**	**-317,056**	**-326,636**	**-390,552**	**-200,234**	**245,667**

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998		1997			
	February	January	Total	December	November	October
Alabama	187	396	-162	243	243	-251
Arkansas	875	1,057	250	1,526	651	271
California	27,350	30,733	16,340	58,418	2,846	-11,717
Colorado	6,255	3,470	-525	5,026	2,503	359
Illinois	37,109	59,692	-10,153	44,906	2,805	-28,399
Indiana	3,335	4,158	984	4,193	-879	-3,088
Iowa	5,558	19,310	-6,255	17,041	505	-8,412
Kansas	8,141	14,910	-11,372	12,277	8,384	-7,782
Kentucky	9,965	9,510	3,013	10,773	4,035	-2,926
Louisiana	264	21,556	-9,248	43,644	20,997	-24,035
Maryland	2,507	2,951	-544	1,298	33	-2,346
Michigan	46,095	84,391	-3,388	78,027	53,016	-32,466
Minnesota	203	444	-373	4	4	0
Mississippi	4,112	7,481	3,763	8,484	1,089	-2,126
Missouri	10	458	-453	228	-207	-215
Montana	2,554	4,421	11,962	3,169	2,760	1,015
Nebraska	425	490	-1,590	944	124	-69
New Mexico	-130	-412	2,065	2,500	25	-1,305
New York	9,298	11,466	304	10,735	4,857	-2,211
Ohio	34,200	35,002	-7,336	40,530	15,502	-8,809
Oklahoma	715	21,282	-9,482	25,362	13,995	-19,663
Oregon	1,238	534	-1,316	1,036	-262	-97
Pennsylvania	49,416	57,879	28,381	53,825	26,061	-15,914
Tennessee	60	116	0	0	0	0
Texas	-3,634	35,289	10,035	53,619	18,531	-30,600
Utah	5,033	5,649	-7,571	13,169	2,721	-1,301
Virginia	444	63	0	0	0	0
Washington	4,131	-62	-1,003	3,159	83	702
West Virginia	32,869	32,069	16,716	36,318	6,615	-8,145
Wyoming	2,092	4,069	908	3,019	1,906	-591
AGA Regions						
Producing	10,342	101,163	-13,990	147,412	63,672	-85,240
Eastern Consuming	231,479	317,949	19,518	299,061	112,710	-113,251
Western Consuming	48,858	49,259	18,423	87,001	12,560	-11,630
Total	**290,679**	**468,371**	**23,950**	**533,474**	**188,941**	**-210,121**

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1998 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 14

Table 14. Activities of Underground Natural Gas Storage Operators, by State, October 1999

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	1,834	3,024	82	4.7	0	77
Arkansas	24,191	7,460	8,961	16,420	73	0.8	385	166
California	388,370	246,825	187,442	434,267	-2,080	-1.1	9,658	4,818
Colorado	99,600	48,229	40,302	88,532	-216	-0.5	3,692	1,273
Illinois	898,565	666,901	235,459	902,360	-32,348	-12.1	32,607	3,674
Indiana	113,210	73,876	33,342	107,218	-25	-0.1	4,004	251
Iowa	273,200	200,700	65,150	265,850	-570	-0.9	11,172	231
Kansas	301,102	179,415	100,529	279,944	-11,352	-10.1	8,265	7,252
Kentucky	219,908	109,117	103,887	213,005	-1,328	-1.3	4,504	3,387
Louisiana	563,868	266,551	255,116	521,668	-8,267	-3.1	21,405	9,276
Maryland	62,000	46,677	14,793	61,471	-238	-1.6	3,403	27
Michigan	1,021,675	460,340	528,007	988,346	-70,079	-11.7	29,322	8,037
Minnesota	7,000	4,623	2,202	6,825	-83	-3.6	175	0
Mississippi	134,012	76,874	44,110	120,984	-12,809	-22.5	4,514	5,647
Missouri	31,274	21,600	9,997	31,597	355	3.7	217	12
Montana	371,510	167,355	42,157	209,512	-10,887	-20.5	1,681	2,200
Nebraska	39,469	31,507	3,886	35,393	-1,085	-21.8	578	102
New Mexico	96,600	29,823	8,906	38,729	-539	-5.7	1,708	1,449
New York	175,129	103,063	70,013	173,076	-5,026	-6.7	3,690	2,752
Ohio	575,384	350,483	189,839	540,322	-7,302	-3.7	13,107	3,823
Oklahoma	394,827	217,527	151,388	368,915	-1,978	-1.3	14,644	3,162
Oregon	11,623	6,834	8,355	15,189	-256	-3.0	0	0
Pennsylvania	684,842	353,981	364,977	718,958	1,766	0.5	29,606	10,605
Tennessee	1,200	340	866	1,206	184	26.9	57	0
Texas	684,226	250,736	290,243	540,979	945	0.3	26,420	15,324
Utah	121,980	64,601	43,073	107,674	-5,969	-12.2	3,799	1,911
Virginia	4,669	2,434	2,357	4,792	8	0.3	110	0
Washington	37,300	19,000	17,485	36,485	3,821	28.0	1,413	11
West Virginia	733,158	290,827	176,511	467,338	-1,632	-0.9	7,487	4,188
Wyoming	105,869	60,782	25,138	85,920	1,907	8.2	519	213
AGA Regions								
Producing	2,198,826	1,028,385	859,253	1,887,638	-33,928	-3.8	77,342	42,275
Eastern Consuming	4,836,962	2,713,036	1,800,919	4,513,956	-117,238	-6.1	139,865	37,165
Western Consuming	1,143,251	618,249	366,154	984,403	-13,763	-3.6	20,937	10,426
Total	**8,179,039**	**4,359,670**	**3,026,326**	**7,385,997**	**-164,929**	**-5.2**	**238,144**	**89,865**

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				September	August	July
Alabama	32,980	38,308	35,137	1,212	1,151	1,287
Alaska	11,618	10,230	9,732	870	481	486
Arizona	25,336	28,290	23,267	1,006	963	1,065
Arkansas	NA	29,863	30,701	NA	952	998
California	442,954	414,741	345,939	24,491	23,371	25,721
Colorado	NA	82,855	83,683	NA	NA	NA
Connecticut	28,343	26,144	29,284	947	853	946
Delaware	6,879	6,059	6,837	169	168	201
District of Columbia	NA	10,139	11,419	325	315	NA
Florida	9,915	11,448	9,524	611	605	647
Georgia	NA	78,583	71,303	NA	NA	2,246
Hawaii	402	412	392	41	41	45
Idaho	12,968	11,398	10,803	436	359	428
Illinois	306,617	280,433	341,758	12,550	9,093	9,972
Indiana	NA	100,054	117,933	NA	NA	4,110
Iowa	51,811	49,013	56,991	1,833	1,233	1,825
Kansas	NA	53,308	48,703	1,572	1,696	1,556
Kentucky	40,702	37,925	43,704	1,402	1,190	1,174
Louisiana	33,511	38,099	38,558	1,733	1,649	1,761
Maine	657	621	694	29	25	22
Maryland	NA	49,486	54,933	1,951	1,733	NA
Massachusetts	NA	76,028	81,698	NA	NA	NA
Michigan	254,023	231,746	274,007	7,838	6,432	6,908
Minnesota	82,594	74,298	89,836	3,367	2,523	2,243
Mississippi	NA	19,963	19,808	796	690	784
Missouri	87,167	85,452	92,839	2,748	2,296	2,557
Montana	13,517	12,907	14,523	636	378	518
Nebraska	30,715	31,533	35,536	792	1,118	1,003
Nevada	21,282	21,795	18,410	958	926	945
New Hampshire	4,969	4,668	5,062	161	142	153
New Jersey	NA	145,433	156,332	NA	NA	NA
New Mexico	30,889	23,854	23,095	2,022	1,841	822
New York	NA	252,257	275,246	NA	NA	NA
North Carolina	40,497	39,773	37,379	1,037	924	1,118
North Dakota	7,809	7,174	8,381	301	197	232
Ohio	NA	206,816	248,660	6,865	NA	6,624
Oklahoma	48,647	53,020	52,584	1,513	1,444	1,657
Oregon	28,012	24,238	23,589	921	811	839
Pennsylvania	175,391	156,793	185,298	5,776	4,808	5,112
Rhode Island	13,031	12,524	13,530	445	399	531
South Carolina	19,071	20,311	17,997	488	448	492
South Dakota	8,613	8,287	9,592	300	224	274
Tennessee	NA	45,499	44,187	1,526	1,162	1,066
Texas	128,351	150,898	166,841	5,848	5,300	5,982
Utah	36,972	36,706	37,414	2,285	1,484	2,254
Vermont	1,952	1,851	1,954	59	57	56
Virginia	NA	45,418	51,338	1,488	1,404	1,524
Washington	NA	46,789	39,190	NA	NA	NA
West Virginia	NA	21,598	24,181	688	NA	533
Wisconsin	86,670	79,155	92,541	3,442	2,821	2,675
Wyoming	8,801	9,079	8,867	508	251	310
Total	**3,432,641**	**3,303,273**	**3,521,208**	**136,170**	**118,143**	**129,000**

See footnotes at end of table.

Table 15

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	June	May	April	March	February	January
Alabama	1,387	1,914	3,979	6,535	6,297	9,218
Alaska	559	939	1,315	2,075	2,223	2,668
Arizona	1,352	2,109	3,319	3,694	5,415	6,411
Arkansas	1,030	1,641	3,732	5,157	5,260	9,049
California	32,952	40,596	62,112	67,403	77,973	88,334
Colorado	4,769	9,761	10,816	13,735	15,467	21,300
Connecticut	1,128	1,879	3,623	5,780	6,082	7,104
Delaware	254	497	989	1,574	1,469	1,560
District of Columbia	399	687	1,269	2,324	2,309	2,915
Florida	712	841	1,217	1,651	1,500	2,130
Georgia	1,525	NA	4,937	11,239	13,564	17,037
Hawaii	43	44	46	44	48	49
Idaho	645	1,244	1,875	2,257	2,633	3,090
Illinois	11,127	15,873	31,264	61,443	61,466	93,829
Indiana	5,062	NA	NA	NA	NA	32,227
Iowa	1,597	3,082	5,544	9,861	10,655	16,180
Kansas	2,170	3,603	6,284	NA	NA	NA
Kentucky	1,336	1,806	4,113	9,268	8,782	11,632
Louisiana	1,908	2,264	3,754	5,450	5,871	9,121
Maine	31	45	76	131	133	165
Maryland	2,172	NA	6,125	NA	NA	14,660
Massachusetts	NA	NA	NA	NA	17,836	12,570
Michigan	10,413	16,098	31,611	53,870	52,118	68,735
Minnesota	3,103	4,967	8,560	15,337	17,086	25,409
Mississippi	813	1,063	NA	3,709	3,016	5,463
Missouri	3,089	5,321	9,692	16,624	18,572	26,270
Montana	645	1,380	1,894	2,114	2,494	3,457
Nebraska	1,180	2,630	3,735	5,726	5,954	8,576
Nevada	1,240	1,853	2,718	3,349	4,332	4,962
New Hampshire	195	371	672	991	1,036	1,246
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	922	1,163	2,876	6,499	4,912	9,831
New York	NA	NA	NA	NA	NA	NA
North Carolina	1,316	2,605	5,341	9,456	7,485	11,215
North Dakota	266	627	984	1,318	1,565	2,320
Ohio	7,972	12,577	26,862	51,348	49,202	59,175
Oklahoma	1,923	3,079	6,228	8,399	9,446	14,958
Oregon	1,635	2,754	3,888	5,047	5,783	6,336
Pennsylvania	6,518	11,260	21,700	37,498	36,752	45,967
Rhode Island	557	949	1,702	2,704	2,662	3,083
South Carolina	570	1,195	2,226	4,375	3,588	5,687
South Dakota	324	629	1,140	1,486	1,719	2,516
Tennessee	1,422	NA	NA	7,650	8,927	14,795
Texas	6,729	8,323	14,678	18,993	22,662	39,835
Utah	1,648	2,663	5,267	5,425	7,725	8,220
Vermont	77	159	284	377	387	496
Virginia	1,605	NA	5,135	11,359	11,272	13,064
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	NA	NA	4,946	6,230
Wisconsin	3,272	5,018	9,062	16,429	17,018	26,931
Wyoming	497	1,095	1,225	1,313	1,674	1,929
Total	**155,137**	**234,464**	**416,530**	**660,439**	**680,078**	**902,680**

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	46,544	4,447	2,468	1,320	1,196	1,183
Alaska	15,617	2,183	1,858	1,346	818	648
Arizona	36,100	4,666	2,008	1,136	940	902
Arkansas	38,190	4,550	2,668	1,109	861	872
California	549,931	68,831	40,200	26,159	22,038	21,625
Colorado	110,839	14,812	8,806	4,366	2,806	2,541
Connecticut	35,329	4,442	3,224	1,518	927	839
Delaware	7,755	895	571	231	176	164
District of Columbia	13,249	1,563	1,088	459	340	328
Florida	14,102	1,127	842	685	657	649
Georgia	107,398	15,049	9,441	4,325	2,889	2,850
Hawaii	535	44	40	39	41	40
Idaho	16,002	2,438	1,510	657	316	292
Illinois	409,812	63,990	43,853	21,536	10,506	10,434
Indiana	140,122	20,031	13,541	6,497	3,221	2,803
Iowa	68,901	10,514	6,345	3,030	1,435	1,445
Kansas	70,217	8,767	5,820	2,322	1,479	1,546
Kentucky	55,545	9,289	6,112	2,220	1,150	1,081
Louisiana	47,574	4,987	2,703	1,785	1,719	1,588
Maine	910	132	95	62	27	25
Maryland	68,057	9,224	6,485	2,863	1,882	1,904
Massachusetts	102,062	12,366	9,367	4,301	2,588	2,370
Michigan	319,701	42,328	29,671	15,956	7,580	6,782
Minnesota	110,449	18,639	12,193	5,319	2,678	2,461
Mississippi	24,847	2,556	1,524	805	725	718
Missouri	110,779	13,873	8,099	3,355	2,627	2,192
Montana	19,172	2,931	2,069	1,266	477	471
Nebraska	40,771	4,230	3,386	1,623	883	1,030
Nevada	30,023	4,335	2,526	1,367	824	813
New Hampshire	6,267	739	566	294	159	156
New Jersey	196,658	25,091	17,413	8,720	5,100	4,945
New Mexico	35,877	7,299	3,552	1,171	841	846
New York	339,512	41,937	30,010	15,308	9,546	8,900
North Carolina	50,786	5,735	4,062	1,217	973	914
North Dakota	10,092	1,427	1,016	475	198	204
Ohio	296,576	43,384	30,086	16,290	6,390	7,314
Oklahoma	66,521	7,513	4,245	1,743	1,449	1,409
Oregon	34,417	5,555	3,180	1,445	767	668
Pennsylvania	217,929	29,772	21,159	10,204	5,161	5,058
Rhode Island	16,461	1,883	1,408	645	436	438
South Carolina	25,430	2,818	1,726	575	471	446
South Dakota	11,646	1,669	1,157	533	248	227
Tennessee	59,386	8,043	4,397	1,447	1,159	1,093
Texas	199,454	28,302	12,931	7,323	5,893	5,774
Utah	56,843	9,846	5,820	4,472	1,916	1,335
Vermont	2,454	289	213	102	114	57
Virginia	63,186	9,067	6,203	2,499	1,467	1,075
Washington	61,936	7,989	4,731	2,427	1,667	1,574
West Virginia	29,664	3,974	2,791	1,300	623	526
Wisconsin	115,946	18,710	11,701	6,381	2,723	2,768
Wyoming	12,702	1,636	1,214	773	310	307
Total	**4,520,276**	**615,913**	**398,094**	**202,996**	**121,417**	**116,631**

See footnotes at end of table.

Table 15

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	1,212	1,394	2,354	4,584	7,486	9,216
Alaska	479	628	933	1,239	1,529	1,716
Arizona	1,070	1,385	2,107	3,722	5,362	5,646
Arkansas	963	1,006	1,725	3,926	6,076	6,675
California	25,149	33,208	38,119	54,074	62,009	76,213
Colorado	3,454	1,664	7,886	11,619	16,272	16,905
Connecticut	1,017	1,183	1,858	3,600	4,997	5,526
Delaware	196	250	446	840	1,240	1,351
District of Columbia	372	436	638	1,198	2,038	2,372
Florida	705	779	920	1,509	1,881	2,073
Georgia	2,981	3,210	3,577	8,076	16,448	18,186
Hawaii	45	47	41	49	45	52
Idaho	403	667	906	1,563	2,035	2,236
Illinois	9,488	11,525	14,764	32,946	60,088	53,096
Indiana	2,817	3,739	5,390	12,074	21,395	21,137
Iowa	1,596	1,436	2,808	5,824	10,640	10,267
Kansas	1,746	2,092	3,604	7,007	11,261	11,354
Kentucky	1,293	1,295	1,955	3,926	8,142	8,493
Louisiana	1,774	1,815	2,464	4,059	7,043	8,311
Maine	22	31	45	71	120	127
Maryland	1,874	2,139	3,047	5,778	9,697	11,172
Massachusetts	2,848	3,827	5,550	10,361	14,826	16,570
Michigan	7,330	9,848	13,991	31,983	47,775	49,366
Minnesota	2,540	2,765	3,735	7,122	16,348	15,031
Mississippi	729	812	1,253	2,283	3,861	4,516
Missouri	2,643	3,141	5,002	10,481	17,840	19,049
Montana	499	669	865	1,672	2,426	2,404
Nebraska	1,011	1,202	1,968	4,339	6,505	6,666
Nevada	977	1,487	1,884	2,826	3,809	4,149
New Hampshire	169	220	355	643	853	974
New Jersey	5,345	6,164	12,559	18,824	28,392	31,571
New Mexico	828	286	1,279	2,609	4,776	4,387
New York	15,342	12,205	18,810	32,412	48,382	51,711
North Carolina	1,058	1,207	2,272	5,083	7,633	9,836
North Dakota	230	286	480	935	1,436	1,531
Ohio	8,085	8,568	11,640	25,083	44,588	44,246
Oklahoma	1,624	1,889	3,326	6,412	11,028	11,862
Oregon	944	1,684	2,174	2,900	4,303	4,624
Pennsylvania	5,332	6,834	9,648	19,457	32,685	34,880
Rhode Island	462	622	1,001	1,662	2,402	2,720
South Carolina	461	543	1,067	2,457	4,060	5,280
South Dakota	274	304	508	1,127	1,738	1,666
Tennessee	1,164	1,397	2,586	4,992	9,552	11,323
Texas	6,039	6,086	9,090	15,365	27,829	33,882
Utah	1,266	1,962	2,248	4,863	6,494	8,209
Vermont	56	77	118	266	340	397
Virginia	1,435	1,747	2,525	4,741	9,677	11,135
Washington	1,765	2,312	3,221	5,827	8,950	9,711
West Virginia	513	670	1,278	2,879	4,540	4,894
Wisconsin	2,421	3,444	4,075	9,186	17,107	15,358
Wyoming	345	523	735	1,278	1,658	1,746
Total	**132,390**	**152,708**	**220,830**	**407,752**	**647,619**	**691,819**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				September	August	July
Alabama	20,742	20,326	24,275	1,711	1,635	1,626
Alaska	18,506	18,720	18,530	1,520	1,311	1,213
Arizona	23,665	24,149	22,617	1,809	1,683	1,846
Arkansas	NA	21,535	21,390	NA	1,520	1,303
California	231,668	200,640	184,636	16,411	20,556	22,460
Colorado	NA	47,405	50,612	NA	NA	NA
Connecticut	34,739	31,417	30,416	1,774	2,449	2,535
Delaware	4,702	4,269	4,963	179	159	182
District of Columbia	NA	13,298	13,380	862	840	NA
Florida	26,496	28,918	27,201	2,147	1,965	2,001
Georgia	NA	42,750	39,493	NA	NA	1,643
Hawaii	1,313	1,320	1,398	144	140	144
Idaho	9,251	8,415	8,183	459	420	425
Illinois	133,938	122,903	140,604	6,919	6,187	6,218
Indiana	NA	52,190	57,865	NA	NA	3,599
Iowa	32,567	30,359	34,237	1,626	1,246	1,520
Kansas	NA	32,589	30,274	1,792	1,958	1,687
Kentucky	26,153	22,951	25,877	1,189	1,845	1,014
Louisiana	18,418	18,759	19,067	1,374	1,484	1,416
Maine	1,789	1,707	1,874	78	74	75
Maryland	NA	42,721	35,421	3,063	3,081	NA
Massachusetts	NA	70,320	78,842	NA	NA	NA
Michigan	128,883	118,915	137,533	5,870	4,984	5,465
Minnesota	62,753	55,441	63,993	3,175	2,956	2,645
Mississippi	NA	16,616	15,882	1,047	1,063	1,054
Missouri	49,368	48,013	51,320	2,423	2,080	3,128
Montana	8,522	8,842	9,783	426	346	423
Nebraska	21,698	21,724	25,731	1,067	772	1,074
Nevada	17,848	17,587	16,248	1,268	1,804	1,935
New Hampshire	NA	5,016	5,365	221	227	212
New Jersey	NA	106,326	121,122	NA	NA	NA
New Mexico	23,709	19,599	19,347	1,884	1,991	1,489
New York	NA	252,166	237,434	NA	NA	NA
North Carolina	35,055	28,073	27,170	1,842	1,595	1,586
North Dakota	7,590	7,152	7,839	338	262	279
Ohio	NA	113,100	131,079	4,789	NA	4,701
Oklahoma	30,431	33,922	33,216	1,878	1,677	1,697
Oregon	21,329	18,396	18,697	1,092	983	1,128
Pennsylvania	102,870	94,216	100,904	5,168	4,672	4,536
Rhode Island	8,859	8,492	9,039	454	334	501
South Carolina	16,126	15,214	13,997	1,144	1,073	1,127
South Dakota	7,092	6,683	7,537	301	267	313
Tennessee	NA	39,898	39,502	2,919	2,265	2,287
Texas	142,372	125,005	158,483	11,568	12,805	12,486
Utah	20,862	20,737	20,686	1,257	902	1,090
Vermont	1,799	2,138	2,182	81	77	66
Virginia	NA	42,477	43,696	2,617	2,671	2,613
Washington	NA	34,423	29,380	NA	NA	NA
West Virginia	NA	18,099	18,213	1,410	NA	1,235
Wisconsin	61,902	56,742	60,631	2,968	3,189	3,056
Wyoming	6,743	7,171	8,146	378	229	361
Total	**2,299,354**	**2,199,846**	**2,305,309**	**144,298**	**145,103**	**146,478**

See footnotes at end of table.

Table 16

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	June	May	April	March	February	January
Alabama	1,628	1,505	2,190	3,240	3,145	4,063
Alaska	1,326	1,759	1,962	3,009	3,088	3,318
Arizona	2,155	2,519	2,994	3,173	3,587	3,899
Arkansas	NA	NA	2,508	3,392	3,510	5,524
California	21,554	26,027	27,181	29,559	31,671	36,249
Colorado	3,359	5,544	NA	7,598	8,919	11,360
Connecticut	2,591	3,204	3,724	5,831	6,038	6,594
Delaware	215	350	637	998	944	1,038
District of Columbia	940	1,249	1,976	2,334	2,549	2,486
Florida	2,436	2,793	3,408	3,962	3,747	4,038
Georgia	1,712	NA	2,968	5,657	5,897	7,205
Hawaii	143	143	147	142	158	153
Idaho	520	852	1,233	1,532	1,734	2,076
Illinois	5,979	8,316	14,051	24,495	26,217	35,555
Indiana	NA	NA	NA	NA	12,336	16,862
Iowa	1,406	1,762	3,777	6,196	6,154	8,881
Kansas	1,504	2,018	3,336	NA	NA	NA
Kentucky	1,218	1,690	2,570	5,149	4,979	6,499
Louisiana	1,493	1,625	2,087	2,520	2,729	3,691
Maine	90	122	199	357	341	454
Maryland	3,186	NA	5,678	NA	NA	9,013
Massachusetts	4,936	5,322	9,335	10,580	NA	6,662
Michigan	6,183	9,050	14,920	25,952	25,441	31,020
Minnesota	2,860	4,058	6,911	11,125	12,637	16,386
Mississippi	1,078	NA	NA	2,676	2,196	NA
Missouri	2,471	3,258	5,235	8,535	9,736	12,503
Montana	492	734	1,153	1,308	1,542	2,096
Nebraska	1,123	1,827	2,308	3,484	4,246	5,797
Nevada	1,400	1,703	1,977	2,372	2,486	2,903
New Hampshire	266	NA	658	1,026	1,070	1,312
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	1,524	1,970	2,728	3,324	3,748	5,051
New York	NA	NA	NA	NA	NA	NA
North Carolina	1,698	2,221	3,583	9,816	6,322	6,392
North Dakota	286	623	909	1,253	1,558	2,083
Ohio	5,540	7,871	15,260	24,202	26,668	28,502
Oklahoma	938	2,265	3,813	4,620	5,679	7,865
Oregon	1,462	2,053	2,699	3,462	3,897	4,554
Pennsylvania	5,041	6,751	12,734	20,162	21,547	22,259
Rhode Island	526	650	1,085	1,731	1,686	1,892
South Carolina	1,109	1,343	1,948	3,188	2,236	2,957
South Dakota	438	493	914	1,149	1,343	1,873
Tennessee	3,361	2,601	NA	6,378	6,629	9,437
Texas	12,020	12,790	15,844	17,651	19,696	27,511
Utah	989	1,858	2,920	3,068	4,198	4,580
Vermont	91	140	227	334	321	462
Virginia	2,584	NA	5,242	7,620	8,070	9,051
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,969	2,253	3,496	3,389	3,961
Wisconsin	2,948	3,362	6,980	11,437	11,592	16,370
Wyoming	448	844	941	1,070	1,120	1,352
Total	**148,498**	**184,397**	**265,165**	**383,047**	**398,437**	**483,932**

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	25,707	2,414	1,716	1,248	1,091	1,026
Alaska	27,079	3,372	2,668	2,318	1,619	1,414
Arizona	31,940	3,388	2,352	1,900	1,738	1,719
Arkansas	28,063	3,169	1,999	1,359	1,143	1,205
California	284,885	31,538	26,959	23,016	22,759	25,640
Colorado	63,145	7,432	4,973	3,321	2,371	2,166
Connecticut	42,410	4,986	3,251	2,678	2,033	2,171
Delaware	5,592	629	448	243	180	176
District of Columbia	16,866	1,480	1,205	879	833	843
Florida	37,743	3,320	2,818	2,603	2,556	2,640
Georgia	55,431	5,531	4,094	3,045	2,584	2,618
Hawaii	1,747	151	143	132	140	155
Idaho	11,712	1,640	1,045	577	386	380
Illinois	174,747	24,727	17,109	9,948	6,521	6,399
Indiana	73,184	9,557	7,058	4,311	2,897	1,984
Iowa	43,028	6,006	4,261	2,402	1,210	1,166
Kansas	41,788	4,591	3,019	1,588	1,323	1,713
Kentucky	32,468	4,714	3,198	1,601	1,089	1,073
Louisiana	24,049	2,224	1,707	1,352	1,285	1,364
Maine	2,456	337	247	165	78	74
Maryland	57,432	6,433	4,928	3,287	2,832	3,085
Massachusetts	90,099	6,635	7,440	5,698	2,359	3,606
Michigan	163,400	20,671	15,174	8,608	5,685	5,694
Minnesota	82,377	12,652	8,896	5,356	2,717	2,289
Mississippi	21,360	2,075	1,512	1,155	1,327	1,198
Missouri	62,000	7,177	4,415	2,389	2,192	3,005
Montana	12,961	1,925	1,340	845	439	415
Nebraska	28,911	3,934	2,218	1,036	963	862
Nevada	23,347	2,565	1,855	1,307	1,110	1,071
New Hampshire	6,808	810	612	371	222	229
New Jersey	146,654	18,767	12,883	8,677	7,010	5,711
New Mexico	27,395	4,125	2,233	1,249	1,090	1,073
New York	335,800	34,796	27,494	20,887	16,899	22,277
North Carolina	36,427	3,847	2,741	1,767	1,594	1,571
North Dakota	10,085	1,362	1,020	547	324	348
Ohio	157,061	21,929	14,894	6,706	4,995	4,036
Oklahoma	43,910	5,463	2,771	1,644	1,628	1,641
Oregon	26,024	3,619	2,681	1,291	1,023	880
Pennsylvania	131,036	16,940	12,808	7,032	4,507	4,996
Rhode Island	11,482	1,338	1,019	628	483	195
South Carolina	19,829	1,926	1,531	1,156	1,065	1,028
South Dakota	9,265	1,305	913	363	269	262
Tennessee	52,406	5,924	4,053	2,520	2,390	2,215
Texas	169,613	19,965	14,533	10,107	12,410	11,729
Utah	31,091	4,934	3,202	2,083	1,028	845
Vermont	2,979	401	276	165	125	100
Virginia	58,318	7,186	5,334	3,287	2,449	1,857
Washington	45,673	5,595	3,442	2,102	1,869	1,818
West Virginia	24,991	2,963	2,345	1,579	1,237	1,185
Wisconsin	81,375	11,803	8,411	4,360	3,317	3,096
Wyoming	10,423	1,822	927	493	343	253
Total	**3,004,570**	**362,095**	**264,170**	**173,381**	**139,737**	**144,498**

See footnotes at end of table.

Table 16

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	1,027	1,122	1,457	2,386	3,566	4,082
Alaska	1,415	1,511	1,976	2,222	2,604	2,674
Arizona	1,899	2,073	2,494	3,011	3,549	3,535
Arkansas	1,277	1,213	1,431	2,544	3,855	4,088
California	23,301	16,352	20,004	20,978	17,981	25,831
Colorado	2,655	3,087	4,320	6,187	8,262	8,403
Connecticut	2,448	2,143	2,115	4,279	4,980	5,516
Delaware	191	227	321	558	812	883
District of Columbia	867	909	1,080	1,824	2,028	2,376
Florida	2,618	2,799	3,059	3,615	3,722	3,879
Georgia	2,712	2,718	3,243	4,687	7,438	8,205
Hawaii	134	148	140	145	140	150
Idaho	405	535	686	1,072	1,417	1,564
Illinois	5,203	6,242	6,893	15,152	23,767	22,336
Indiana	2,413	2,650	3,206	6,292	9,874	10,260
Iowa	1,353	1,200	1,513	3,593	6,362	5,991
Kansas	1,811	1,619	1,973	3,225	7,699	6,044
Kentucky	996	1,096	1,466	2,423	4,522	4,755
Louisiana	1,290	1,458	1,597	2,147	2,982	3,179
Maine	75	90	122	195	316	335
Maryland	2,933	3,126	3,478	4,897	7,138	7,358
Massachusetts	4,264	5,336	5,846	9,039	11,907	13,826
Michigan	5,197	6,183	8,265	15,595	22,766	23,610
Minnesota	2,003	2,992	3,171	5,531	11,517	10,777
Mississippi	1,265	1,192	1,229	1,645	2,635	3,114
Missouri	2,184	2,450	2,984	5,556	8,999	9,496
Montana	424	481	589	1,089	1,605	1,534
Nebraska	1,085	869	1,717	2,829	4,097	4,310
Nevada	1,323	1,605	1,898	2,213	2,667	2,595
New Hampshire	228	280	376	623	898	994
New Jersey	5,924	6,478	9,830	11,710	20,041	19,672
New Mexico	1,039	963	1,603	2,384	3,357	3,377
New York	18,694	16,706	20,849	29,457	37,862	40,931
North Carolina	1,437	1,583	1,975	3,222	4,732	5,635
North Dakota	280	305	497	935	1,343	1,405
Ohio	5,461	5,162	7,127	13,278	21,607	24,176
Oklahoma	1,585	1,808	2,315	4,249	6,218	6,692
Oregon	1,030	1,440	1,626	2,096	3,136	3,294
Pennsylvania	4,584	5,005	5,955	11,091	16,969	19,608
Rhode Island	496	506	694	1,141	1,518	1,642
South Carolina	1,011	1,058	1,208	1,728	2,417	2,770
South Dakota	282	285	538	806	1,333	1,288
Tennessee	2,365	2,503	3,003	4,490	6,814	7,821
Texas	13,215	9,114	10,425	11,880	16,276	18,456
Utah	847	1,156	1,513	2,755	3,795	4,243
Vermont	102	110	116	281	381	436
Virginia	2,652	2,572	3,547	4,806	7,713	8,311
Washington	1,947	2,291	2,738	4,236	5,824	6,430
West Virginia	1,102	1,146	1,273	2,176	3,154	3,363
Wisconsin	2,893	3,347	3,569	6,609	11,009	9,999
Wyoming	371	442	597	936	1,279	1,322
Total	**142,313**	**137,688**	**169,645**	**255,821**	**366,881**	**392,573**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A,Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				September	August	July
Alabama	151,618	151,421	147,846	16,497	16,973	16,525
Alaska	54,085	56,964	54,907	4,738	4,784	6,932
Arizona	20,203	20,653	20,487	2,160	2,276	1,987
Arkansas	NA	111,417	109,371	11,997	12,415	10,987
California	674,031	608,571	551,954	98,766	94,185	82,007
Colorado	NA	65,897	55,000	NA	NA	NA
Connecticut	22,522	24,357	25,653	2,283	2,308	2,221
Delaware	15,958	11,921	10,679	1,798	1,670	1,757
District of Columbia	0	0	0	0	0	0
Florida	106,882	95,813	98,214	11,153	12,870	12,478
Georgia	NA	125,505	135,645	NA	NA	8,080
Hawaii	340	0	0	39	41	40
Idaho [a]	25,036	26,151	25,506	2,735	2,173	2,450
Illinois	226,292	221,541	234,104	22,294	21,598	21,500
Indiana	NA	213,583	210,838	NA	NA	NA
Iowa	78,474	77,690	77,783	7,486	7,425	7,195
Kansas	NA	82,995	87,834	6,904	9,497	9,275
Kentucky	67,702	68,619	69,226	6,954	6,321	6,402
Louisiana	720,928	689,607	749,226	76,490	78,575	80,375
Maine	1,624	1,643	1,770	190	179	153
Maryland	NA	28,212	43,370	2,918	2,927	2,508
Massachusetts	NA	92,087	83,198	NA	NA	NA
Michigan	208,657	211,884	251,610	19,077	18,271	19,911
Minnesota	79,366	77,295	77,900	7,064	9,164	7,598
Mississippi	NA	59,141	61,583	6,310	6,287	6,669
Missouri	NA	49,007	52,978	4,689	4,815	4,751
Montana	17,076	15,449	13,091	1,305	1,326	1,293
Nebraska	30,957	42,730	33,020	4,465	3,949	5,432
Nevada	24,569	20,063	21,798	2,795	2,745	2,504
New Hampshire	4,427	4,309	4,421	471	478	442
New Jersey	NA	154,741	153,777	NA	NA	NA
New Mexico	NA	18,451	19,293	2,933	3,568	3,371
New York	NA	199,806	231,295	22,229	NA	NA
North Carolina	82,060	80,182	82,885	8,712	10,082	9,288
North Dakota	13,514	15,761	15,802	1,295	652	1,155
Ohio	NA	246,620	248,433	24,938	NA	23,427
Oklahoma	107,480	153,642	158,573	10,617	9,782	9,601
Oregon	112,487	75,393	63,620	8,301	37,974	8,008
Pennsylvania	180,712	172,853	176,819	18,426	18,582	17,497
Rhode Island	26,166	31,300	18,636	2,535	2,496	2,969
South Carolina	75,660	75,753	76,837	7,996	7,948	7,342
South Dakota	3,683	4,160	5,279	305	437	419
Tennessee	NA	105,905	102,987	14,597	13,428	12,826
Texas	NA	1,457,476	1,553,125	182,830	142,569	120,019
Utah	29,925	34,672	31,339	3,192	3,180	3,200
Vermont	1,958	1,543	1,650	183	176	174
Virginia	NA	68,305	64,907	NA	13,726	12,484
Washington	NA	101,575	79,185	NA	NA	NA
West Virginia	NA	37,828	42,719	3,220	NA	3,942
Wisconsin	107,022	102,353	113,855	10,307	9,595	9,235
Wyoming	NA	41,017	34,683	NA	NA	NA
Total	**6,433,470**	**6,433,860**	**6,584,710**	**738,109**	**740,627**	**669,706**

See footnotes at end of table.

Table 17

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	June	May	April	March	February	January
Alabama	15,938	15,947	17,042	19,174	16,360	17,161
Alaska	5,923	6,318	6,244	6,717	5,805	6,626
Arizona	1,956	2,390	2,545	2,237	2,291	2,360
Arkansas	NA	11,429	11,732	12,582	11,561	13,069
California	68,105	69,662	61,776	57,968	71,293	70,270
Colorado	5,605	6,202	7,672	6,272	6,951	4,630
Connecticut	2,055	2,419	2,504	2,790	2,957	2,985
Delaware	1,459	1,789	1,767	1,952	1,878	1,887
District of Columbia	0	0	0	0	0	0
Florida	11,739	11,827	12,512	12,603	10,480	11,219
Georgia	7,177	NA	10,118	13,140	12,545	12,929
Hawaii	43	35	38	39	33	32
Idaho [a]	2,528	2,885	3,167	3,214	3,081	2,802
Illinois	21,056	21,281	25,516	29,721	29,436	33,890
Indiana	NA	NA	NA	NA	26,942	NA
Iowa	6,980	8,326	10,104	9,569	9,554	11,836
Kansas	7,751	NA	8,130	8,482	7,588	NA
Kentucky	6,535	7,087	7,610	9,289	8,179	9,326
Louisiana	80,397	84,470	79,888	82,222	73,872	84,638
Maine	184	171	161	189	104	293
Maryland	2,401	NA	2,845	4,068	3,261	2,727
Massachusetts	NA	8,740	NA	NA	8,643	8,763
Michigan	20,416	22,851	24,820	28,068	26,451	28,793
Minnesota	7,874	7,457	8,485	9,697	11,186	10,841
Mississippi	6,807	7,007	NA	7,546	6,541	NA
Missouri	4,801	4,615	5,395	5,127	NA	6,562
Montana	1,694	1,968	2,120	2,174	2,554	2,642
Nebraska	2,700	2,565	1,178	3,098	3,330	4,240
Nevada	2,573	2,811	2,635	2,816	2,674	3,016
New Hampshire	457	486	578	505	484	526
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	3,279	3,606	NA	3,355	3,047	NA
New York	NA	NA	NA	NA	NA	NA
North Carolina	8,970	8,857	8,867	9,231	8,052	10,001
North Dakota	1,266	1,351	1,479	2,037	2,844	1,434
Ohio	23,595	25,248	28,808	32,257	31,603	33,159
Oklahoma	11,576	11,173	13,128	12,486	14,323	14,794
Oregon	7,861	8,216	8,923	15,206	8,595	9,403
Pennsylvania	17,687	18,565	20,802	23,245	23,747	22,161
Rhode Island	2,948	3,343	2,996	2,528	2,930	3,421
South Carolina	7,708	8,102	9,910	9,614	8,225	8,813
South Dakota	282	347	446	439	463	545
Tennessee	11,262	12,000	NA	14,017	12,922	13,545
Texas	142,830	NA	136,782	144,116	159,127	185,739
Utah	2,351	3,422	3,809	3,718	3,350	3,703
Vermont	157	192	243	301	312	220
Virginia	11,269	NA	10,632	8,644	7,305	5,437
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	3,225	NA	NA	3,460	3,867
Wisconsin	9,243	10,081	12,061	14,729	14,428	17,342
Wyoming	3,056	2,980	3,622	3,837	NA	4,360
Total	**672,988**	**686,237**	**681,677**	**728,547**	**724,777**	**790,802**

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	200,305	16,372	15,972	16,540	15,244	16,751
Alaska	75,947	6,439	6,255	6,289	5,678	6,864
Arizona	28,157	2,605	2,381	2,518	2,073	2,504
Arkansas	147,313	12,537	11,482	11,877	12,825	12,791
California	827,401	74,100	67,304	77,426	85,852	82,886
Colorado	87,238	8,462	6,859	6,020	5,309	6,839
Connecticut	32,498	2,838	2,656	2,647	2,217	2,479
Delaware	16,287	1,529	1,421	1,416	1,186	1,223
District of Columbia	0	0	0	0	0	0
Florida	126,891	10,374	10,704	10,000	10,654	10,120
Georgia	164,501	13,256	13,475	12,265	9,104	13,568
Hawaii	373	373	0	0	0	0
Idaho [a]	34,303	2,635	2,803	2,715	2,705	2,533
Illinois	303,668	28,912	27,909	25,306	21,621	20,197
Indiana	290,973	28,353	24,767	24,269	23,418	21,679
Iowa	105,950	9,261	9,761	9,239	7,874	8,136
Kansas	111,143	8,731	10,061	9,356	7,352	10,556
Kentucky	93,217	8,502	8,232	7,864	6,815	6,805
Louisiana	922,155	87,893	66,701	77,953	79,775	80,974
Maine	2,297	204	222	227	193	181
Maryland	38,531	3,564	3,041	3,714	3,104	3,073
Massachusetts	125,286	12,200	10,887	10,111	9,073	10,001
Michigan	282,036	25,198	23,921	21,034	17,171	16,407
Minnesota	104,610	9,322	8,941	9,052	7,632	8,244
Mississippi	78,640	6,811	6,335	6,353	6,054	6,090
Missouri	64,868	5,988	4,728	5,145	4,520	4,621
Montana	21,416	2,260	1,976	1,732	1,496	1,396
Nebraska	53,053	3,124	3,724	3,475	3,341	5,908
Nevada	28,662	3,003	2,747	2,848	1,830	2,751
New Hampshire	5,878	484	531	555	476	498
New Jersey	204,791	18,623	16,241	15,186	16,072	16,183
New Mexico	25,048	2,239	2,108	2,250	2,150	2,194
New York	251,591	16,736	18,774	16,275	19,142	19,693
North Carolina	106,497	8,862	8,835	8,618	8,125	8,495
North Dakota	20,606	1,898	1,770	1,176	1,709	1,601
Ohio	332,955	31,327	27,938	27,071	23,596	22,907
Oklahoma	198,110	13,058	13,327	18,083	19,908	18,714
Oregon	102,770	9,258	8,889	9,230	8,680	9,122
Pennsylvania	231,362	21,244	19,127	18,138	17,766	17,354
Rhode Island	42,278	3,480	3,666	3,832	3,533	3,403
South Carolina	102,324	8,973	8,931	8,668	8,301	8,229
South Dakota	5,607	572	553	322	414	444
Tennessee	145,773	14,316	12,701	12,852	10,349	11,495
Texas	2,023,278	209,528	187,395	168,879	158,949	170,716
Utah	45,501	3,839	3,546	3,444	3,204	3,049
Vermont	2,105	202	181	179	154	135
Virginia	92,801	7,567	7,937	8,992	7,880	9,398
Washington	133,106	11,961	12,639	6,931	13,051	13,388
West Virginia	49,807	4,143	3,909	3,927	3,714	3,798
Wisconsin	141,980	14,896	13,275	11,457	9,745	9,280
Wyoming	54,259	4,642	4,428	4,172	3,612	3,775
Total	**8,686,147**	**802,693**	**731,965**	**717,629**	**694,645**	**719,443**

See footnotes at end of table.

Table 17

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	16,002	16,576	17,234	16,823	18,091	16,322
Alaska	6,519	6,228	5,832	6,431	6,852	6,129
Arizona	2,302	2,031	2,310	2,275	2,409	2,222
Arkansas	11,978	12,002	12,230	12,253	12,912	11,628
California	73,063	54,921	67,768	60,386	48,465	69,407
Colorado	6,378	6,506	7,336	8,116	8,190	8,215
Connecticut	2,287	2,237	2,560	2,786	3,202	3,172
Delaware	1,100	1,164	1,260	1,354	1,514	1,479
District of Columbia	0	0	0	0	0	0
Florida	10,580	10,668	10,917	10,903	11,488	9,390
Georgia	12,862	14,709	14,119	14,541	15,415	15,122
Hawaii	0	0	0	0	0	0
Idaho [a]	2,623	2,675	2,596	3,051	3,134	3,486
Illinois	20,023	20,511	22,247	26,535	29,044	28,535
Indiana	21,517	21,370	22,528	21,907	27,184	25,572
Iowa	7,603	7,334	7,470	8,888	10,674	8,966
Kansas	11,987	9,829	8,608	8,114	8,807	7,918
Kentucky	6,830	6,844	7,076	7,598	8,989	7,730
Louisiana	78,083	70,377	72,612	74,984	77,310	74,844
Maine	155	187	170	183	184	184
Maryland	3,044	3,030	3,104	3,160	3,680	2,852
Massachusetts	9,545	10,055	8,845	10,925	10,918	10,548
Michigan	16,866	21,068	23,258	25,202	30,195	29,598
Minnesota	7,755	7,895	6,943	8,777	9,431	10,479
Mississippi	5,999	6,139	6,319	6,642	7,487	7,057
Missouri	4,497	4,704	4,724	5,573	6,810	6,446
Montana	1,425	1,595	1,571	1,943	1,904	1,788
Nebraska	8,653	4,434	3,822	3,579	4,246	4,059
Nevada	2,473	2,360	2,476	2,399	2,190	1,952
New Hampshire	438	431	473	494	523	496
New Jersey	15,073	15,090	15,999	16,922	19,200	19,145
New Mexico	2,191	1,952	1,933	1,964	1,948	1,937
New York	20,346	21,141	19,153	22,886	25,653	26,727
North Carolina	7,932	8,315	8,761	8,825	10,054	9,672
North Dakota	1,529	1,802	1,878	1,740	1,811	1,738
Ohio	22,468	23,470	25,447	29,007	31,973	31,835
Oklahoma	17,475	16,899	14,356	15,067	17,380	17,235
Oregon	8,404	7,480	7,296	8,853	8,983	8,969
Pennsylvania	16,933	17,792	17,910	19,952	22,424	20,567
Rhode Island	3,577	3,445	3,746	3,816	3,020	3,405
South Carolina	7,443	8,284	8,494	7,946	8,837	8,869
South Dakota	414	306	704	304	510	499
Tennessee	10,023	10,286	11,432	12,078	14,111	12,908
Texas	179,303	152,107	157,316	153,562	162,415	151,750
Utah	3,434	3,688	3,678	4,494	4,285	4,091
Vermont	153	152	164	164	194	205
Virginia	8,138	8,143	6,310	7,734	6,476	7,473
Washington	11,020	8,350	6,254	13,105	14,395	12,799
West Virginia	3,856	3,932	3,912	4,362	4,958	4,414
Wisconsin	7,600	9,262	9,508	11,720	15,006	13,601
Wyoming	3,937	4,042	5,133	3,966	4,879	5,522
Total	**703,835**	**653,817**	**675,793**	**704,289**	**749,762**	**738,962**

[a] Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components.

[NA] Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				September	August	July
Alabama	18,769	23,216	8,768	1,860	5,683	4,717
Alaska	21,540	20,967	25,149	2,203	2,276	2,551
Arizona	37,786	27,444	20,691	4,690	6,690	6,138
Arkansas	34,300	38,335	21,843	3,096	7,963	7,104
California	139,032	207,978	294,099	9,478	12,228	14,988
Colorado	12,634	7,979	4,060	244	2,588	2,315
Connecticut	10,052	10,378	12,528	1,657	2,045	3,003
Delaware	17,658	8,086	14,356	1,566	3,300	3,804
District of Columbia	0	0	0	0	0	0
Florida	237,506	217,241	239,905	34,297	34,453	33,921
Georgia	19,182	21,034	6,862	1,928	6,506	4,351
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	35,910	51,977	31,887	1,705	3,824	10,896
Indiana	6,994	8,298	4,031	307	1,222	2,646
Iowa	4,585	5,479	3,205	449	722	1,616
Kansas	33,394	31,519	18,710	1,972	8,135	8,527
Kentucky	5,089	5,268	1,646	462	1,157	1,889
Louisiana	262,917	254,792	224,075	32,192	42,861	38,149
Maine	0	0	0	0	0	0
Maryland	14,386	11,384	9,685	1,107	2,845	5,877
Massachusetts	7,948	16,007	42,658	833	702	1,672
Michigan	41,000	37,775	23,881	3,700	4,642	7,611
Minnesota	5,617	6,846	5,465	192	807	1,913
Mississippi	80,027	64,679	59,023	7,503	14,292	14,102
Missouri	15,294	14,771	6,258	983	4,607	4,940
Montana	258	404	329	8	28	112
Nebraska	4,396	4,750	2,191	242	767	1,895
Nevada	48,780	45,195	41,962	6,435	6,682	6,824
New Hampshire	415	124	503	161	98	67
New Jersey	29,151	29,024	25,557	3,182	6,207	11,544
New Mexico	27,375	31,204	25,929	3,360	4,604	3,916
New York	149,041	173,448	174,807	14,068	19,803	26,219
North Carolina	9,277	12,217	3,977	556	3,197	3,807
North Dakota	0	0	1	0	0	0
Ohio	10,526	6,871	2,722	561	1,599	3,367
Oklahoma	142,052	138,046	99,122	13,971	26,954	24,982
Oregon	13,369	17,984	6,699	3,112	2,018	1,575
Pennsylvania	9,203	6,215	6,494	565	1,898	3,241
Rhode Island	0	15,589	19,567	0	0	0
South Carolina	4,969	5,682	2,343	165	1,857	2,291
South Dakota	2,335	2,426	1,513	79	427	646
Tennessee	3,393	6,023	1,427	174	1,218	1,208
Texas	983,205	1,013,962	823,709	117,454	180,640	152,748
Utah	3,838	4,640	3,595	428	592	654
Vermont	242	173	26	90	133	0
Virginia	20,734	17,570	9,636	1,698	3,367	4,066
Washington	2,937	7,657	2,047	1,273	436	52
West Virginia	260	284	188	23	17	25
Wisconsin	12,334	14,544	14,165	862	1,783	4,044
Wyoming	134	248	59	7	5	8
Total	**2,539,844**	**2,645,729**	**2,347,356**	**280,898**	**433,878**	**436,024**

See footnotes at end of table.

Table 18

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	June	May	April	March	February	January
Alabama	1,937	1,289	1,247	925	550	561
Alaska	2,189	2,290	2,282	2,499	2,519	2,733
Arizona	5,287	4,279	4,483	2,013	1,783	2,424
Arkansas	5,602	3,982	2,579	2,034	1,376	564
California	12,409	11,714	18,722	19,915	19,517	20,060
Colorado	1,817	1,987	1,125	1,141	981	438
Connecticut	1,798	1,311	84	123	1	29
Delaware	2,531	2,052	673	1,687	912	1,131
District of Columbia	0	0	0	0	0	0
Florida	29,566	29,547	28,221	18,961	13,119	15,422
Georgia	1,722	1,374	3,046	220	20	16
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,828	2,672	5,295	2,863	1,357	2,470
Indiana	1,174	245	403	332	147	517
Iowa	646	278	348	189	193	145
Kansas	3,543	2,800	3,740	2,451	1,042	1,184
Kentucky	500	214	196	142	90	438
Louisiana	34,541	29,398	25,149	21,653	17,481	21,493
Maine	0	0	0	0	0	0
Maryland	1,826	478	1,382	289	138	444
Massachusetts	1,820	1,572	763	412	51	122
Michigan	5,206	5,210	4,041	3,881	3,061	3,649
Minnesota	728	657	438	437	151	294
Mississippi	9,827	9,505	10,077	4,296	4,678	5,748
Missouri	1,710	496	1,436	279	310	533
Montana	32	6	9	4	5	53
Nebraska	745	201	344	118	44	40
Nevada	5,834	5,642	4,813	4,274	3,699	4,578
New Hampshire	24	16	0	16	0	32
New Jersey	3,439	2,070	658	686	343	1,022
New Mexico	2,706	2,011	3,104	2,789	2,322	2,563
New York	22,476	23,122	14,099	12,815	8,397	8,041
North Carolina	1,102	131	421	25	3	34
North Dakota	0	0	0	0	0	0
Ohio	1,488	737	1,158	971	333	312
Oklahoma	18,440	13,921	13,186	12,492	7,519	10,588
Oregon	876	2,032	1,069	219	936	1,532
Pennsylvania	2,071	465	284	315	105	261
Rhode Island	0	0	0	0	0	0
South Carolina	389	76	109	48	21	14
South Dakota	213	215	279	232	120	125
Tennessee	594	58	141	0	0	0
Texas	127,509	104,215	97,047	81,573	55,651	66,368
Utah	598	166	341	392	337	331
Vermont	2	1	2	6	2	5
Virginia	1,885	2,229	1,812	2,093	1,918	1,666
Washington	39	560	503	6	40	28
West Virginia	32	48	29	35	24	27
Wisconsin	1,895	1,432	553	568	648	550
Wyoming	68	6	4	13	14	9
Total	**323,665**	**272,705**	**255,694**	**206,430**	**151,958**	**178,592**

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	25,546	789	568	973	4,213	5,129
Alaska	28,784	2,957	2,669	2,190	2,402	2,038
Arizona	38,674	3,738	2,716	4,777	6,200	8,185
Arkansas	40,576	367	122	1,753	6,764	8,176
California	271,154	17,740	20,126	25,310	31,816	34,624
Colorado	10,627	918	1,046	684	1,378	1,419
Connecticut	10,719	123	9	209	1,605	2,672
Delaware	11,135	911	1,152	985	1,319	1,672
District of Columbia	0	0	0	0	0	0
Florida	281,346	17,667	18,413	28,024	27,465	29,246
Georgia	22,371	259	337	741	3,350	5,027
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	56,337	1,469	1,465	1,426	6,084	7,669
Indiana	9,096	237	172	389	957	1,695
Iowa	5,947	144	147	177	1,099	1,049
Kansas	36,896	1,679	2,097	1,602	6,109	7,062
Kentucky	5,760	136	151	206	978	1,060
Louisiana	318,395	18,345	20,877	24,381	36,591	44,636
Maine	0	0	0	0	0	0
Maryland	12,303	499	188	232	2,565	3,146
Massachusetts	18,427	725	777	918	1,127	1,965
Michigan	48,321	3,449	3,163	3,934	5,415	5,520
Minnesota	7,738	120	268	504	1,538	1,461
Mississippi	76,362	4,126	3,553	4,004	9,141	11,125
Missouri	16,035	515	521	228	3,067	3,997
Montana	522	36	33	48	69	83
Nebraska	5,044	106	35	154	955	1,161
Nevada	60,937	5,362	4,649	5,732	6,460	8,818
New Hampshire	149	0	25	0	0	26
New Jersey	30,996	792	804	376	3,446	6,216
New Mexico	39,034	2,876	2,246	2,708	3,782	4,850
New York	208,348	10,911	8,116	15,872	20,464	34,201
North Carolina	12,418	36	29	136	2,132	3,116
North Dakota	0	0	0	0	0	0
Ohio	7,663	351	170	272	1,333	1,426
Oklahoma	174,577	13,066	11,482	11,983	21,106	26,807
Oregon	28,883	3,009	4,188	3,701	4,014	3,781
Pennsylvania	6,890	357	98	220	561	455
Rhode Island	15,589	0	0	0	0	2,251
South Carolina	5,893	42	97	72	919	1,237
South Dakota	2,865	189	190	61	366	608
Tennessee	6,213	0	0	190	1,860	1,123
Texas	1,242,574	71,865	61,712	95,036	143,064	161,408
Utah	5,945	493	165	648	1,206	1,323
Vermont	188	4	3	7	11	8
Virginia	20,386	757	625	1,435	3,323	3,645
Washington	13,352	635	1,742	3,318	2,749	3,470
West Virginia	417	25	56	52	20	34
Wisconsin	16,348	730	589	486	2,044	2,338
Wyoming	271	5	6	13	9	1
Total	**3,258,054**	**188,557**	**177,596**	**246,171**	**381,075**	**456,960**

See footnotes at end of table.

Table 18

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	5,071	4,763	2,843	296	382	157
Alaska	2,163	2,102	2,420	2,274	2,391	2,316
Arizona	6,791	1,986	674	1,127	718	803
Arkansas	7,022	6,618	5,431	2,262	1,507	269
California	26,020	15,338	13,746	18,053	23,365	18,272
Colorado	1,763	914	690	581	412	446
Connecticut	1,582	1,708	1,385	157	23	109
Delaware	1,648	1,196	900	548	475	74
District of Columbia	0	0	0	0	0	0
Florida	31,965	33,183	26,818	15,852	18,011	15,630
Georgia	5,457	4,959	1,891	41	149	57
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,640	7,325	7,006	4,790	3,985	3,502
Indiana	1,911	1,732	1,102	231	427	129
Iowa	933	749	674	288	237	195
Kansas	7,713	5,133	3,088	575	891	426
Kentucky	649	950	1,017	107	282	138
Louisiana	43,677	38,806	31,804	18,072	16,190	9,854
Maine	0	0	0	0	0	0
Maryland	2,186	1,396	932	373	371	222
Massachusetts	1,404	2,164	2,661	1,575	1,561	1,316
Michigan	4,553	5,074	4,196	3,582	3,735	2,480
Minnesota	1,389	979	792	264	202	104
Mississippi	10,887	10,629	8,715	4,398	3,920	2,774
Missouri	3,750	2,425	947	208	160	80
Montana	80	26	89	15	39	0
Nebraska	1,022	702	621	173	58	21
Nevada	8,189	4,036	3,932	3,926	2,925	3,377
New Hampshire	37	35	0	0	0	26
New Jersey	7,105	4,303	3,925	1,248	1,835	419
New Mexico	5,283	4,019	3,015	3,446	3,091	1,801
New York	29,277	24,080	18,922	9,089	10,407	10,285
North Carolina	2,041	3,788	1,026	12	91	1
North Dakota	0	0	0	0	0	0
Ohio	1,307	1,103	1,005	179	307	96
Oklahoma	26,740	20,703	13,832	7,905	9,348	5,179
Oregon	3,008	835	176	2,265	1,334	1,101
Pennsylvania	1,411	2,017	622	260	406	257
Rhode Island	2,238	1,453	1,943	1,606	1,888	1,599
South Carolina	1,239	1,413	687	37	105	11
South Dakota	627	315	366	33	42	6
Tennessee	1,407	1,202	432	0	0	0
Texas	174,322	153,383	115,390	82,922	80,353	48,953
Utah	1,126	160	157	153	177	164
Vermont	15	7	12	6	3	47
Virginia	2,969	2,253	2,157	698	1,196	476
Washington	621	33	14	152	121	5
West Virginia	53	46	30	22	29	29
Wisconsin	3,059	2,554	2,279	394	1,106	352
Wyoming	5	10	6	8	3	200
Total	**449,354**	**378,607**	**290,368**	**190,201**	**194,258**	**133,757**

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia.

See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				September	August	July
Alabama	224,108	233,271	216,026	21,280	25,441	24,155
Alaska	105,749	106,881	108,317	9,330	8,852	11,181
Arizona	106,990	100,536	87,062	9,666	11,612	11,036
Arkansas	NA	201,150	183,304	NA	22,850	20,392
California	1,487,686	1,431,930	1,376,628	149,147	150,340	145,177
Colorado	NA	204,137	193,355	NA	NA	NA
Connecticut	95,655	92,297	97,880	6,661	7,655	8,706
Delaware	45,197	30,335	36,834	3,712	5,298	5,945
District of Columbia	NA	23,437	24,799	1,187	1,155	NA
Florida	NA	353,421	374,844	48,208	NA	49,047
Georgia	NA	267,871	253,304	NA	NA	16,320
Hawaii	2,055	1,732	1,790	224	222	229
Idaho	47,254	45,964	44,492	3,630	2,952	3,303
Illinois	702,757	676,854	748,353	43,467	40,702	48,586
Indiana	NA	374,126	390,668	NA	NA	NA
Iowa	167,437	162,540	172,217	11,394	10,625	12,156
Kansas	NA	200,411	185,522	12,240	21,287	21,045
Kentucky	139,646	134,762	140,452	10,008	10,514	10,479
Louisiana	1,035,774	1,001,258	1,030,926	111,788	124,569	121,702
Maine	4,071	3,972	4,337	297	278	251
Maryland	NA	131,803	143,409	9,039	10,586	NA
Massachusetts	NA	254,442	286,396	NA	NA	NA
Michigan	632,563	600,320	687,030	36,485	34,329	39,894
Minnesota	230,331	213,880	237,195	13,799	15,450	14,400
Mississippi	NA	160,399	156,296	15,656	22,332	22,609
Missouri	NA	197,242	203,395	10,842	13,798	15,376
Montana	39,373	37,600	37,726	2,376	2,079	2,345
Nebraska	87,765	100,736	96,479	6,566	6,605	9,405
Nevada	112,479	104,641	98,418	11,456	12,157	12,209
New Hampshire	NA	14,117	15,352	1,014	945	874
New Jersey	NA	435,525	456,789	NA	NA	NA
New Mexico	NA	93,108	87,664	10,200	12,005	9,598
New York	NA	877,677	918,783	NA	NA	NA
North Carolina	166,890	160,245	151,411	12,148	15,798	15,799
North Dakota	28,912	30,088	32,024	1,933	1,111	1,666
Ohio	NA	573,407	630,894	37,153	NA	38,118
Oklahoma	328,610	378,630	343,496	27,979	39,857	37,937
Oregon	175,197	136,011	112,605	13,426	41,786	11,549
Pennsylvania	468,176	430,078	469,515	29,935	29,960	30,386
Rhode Island	48,056	67,906	60,771	3,433	3,229	4,001
South Carolina	115,826	116,959	111,175	9,793	11,327	11,252
South Dakota	21,723	21,555	23,921	986	1,355	1,652
Tennessee	NA	197,325	188,103	19,216	18,073	17,386
Texas	NA	2,747,341	2,702,158	317,700	341,314	291,236
Utah	91,596	96,754	93,034	7,163	6,158	7,198
Vermont	5,950	5,705	5,812	413	443	295
Virginia	NA	173,769	169,577	NA	21,168	20,687
Washington	NA	190,444	149,802	NA	NA	NA
West Virginia	NA	77,809	85,301	5,341	NA	5,735
Wisconsin	267,928	252,793	281,191	17,578	17,388	19,010
Wyoming	NA	57,515	51,756	NA	NA	NA
Total	**14,705,309**	**14,582,708**	**14,758,584**	**1,299,475**	**1,437,751**	**1,381,208**

See footnotes at end of table.

Table 19

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1999					
	June	May	April	March	February	January
Alabama	20,890	20,655	24,458	29,873	26,353	31,003
Alaska	9,997	11,306	11,803	14,299	13,635	15,345
Arizona	10,750	11,297	13,342	11,117	13,076	15,094
Arkansas	19,737	18,551	20,551	23,164	21,707	28,207
California	135,021	147,999	169,791	174,845	200,454	214,913
Colorado	15,549	23,494	25,892	28,747	32,318	37,728
Connecticut	7,572	8,812	9,935	14,524	15,078	16,712
Delaware	4,459	4,687	4,066	6,212	5,203	5,616
District of Columbia	1,339	1,936	3,245	4,658	4,857	5,400
Florida	44,453	45,008	45,358	37,177	28,845	32,810
Georgia	12,136	13,102	21,069	30,255	32,026	37,187
Hawaii	229	222	231	226	238	233
Idaho	3,694	4,982	6,275	7,004	7,448	7,967
Illinois	42,991	48,143	76,127	118,522	118,476	165,743
Indiana	40,366	NA	NA	NA	62,390	80,565
Iowa	10,629	13,448	19,774	25,814	26,556	37,042
Kansas	14,968	NA	21,489	26,377	25,841	NA
Kentucky	9,588	10,796	14,490	23,847	22,029	27,895
Louisiana	118,339	117,757	110,878	111,845	99,953	118,943
Maine	305	338	435	676	578	913
Maryland	9,584	NA	16,031	23,839	22,281	26,844
Massachusetts	28,815	24,380	34,711	44,616	35,459	28,118
Michigan	42,217	53,208	75,392	111,770	107,071	132,196
Minnesota	14,565	17,138	24,393	36,595	41,060	52,931
Mississippi	18,524	18,935	NA	18,227	16,431	21,785
Missouri	12,071	13,690	21,758	30,564	NA	45,867
Montana	2,864	4,088	5,177	5,599	6,596	8,249
Nebraska	5,749	7,223	7,565	12,426	13,574	18,653
Nevada	11,047	12,008	12,142	12,810	13,191	15,458
New Hampshire	943	NA	1,909	2,539	2,590	3,115
New Jersey	NA	NA	NA	NA	NA	NA
New Mexico	8,431	8,750	NA	15,967	14,028	NA
New York	NA	NA	NA	NA	NA	NA
North Carolina	13,087	13,814	18,212	28,528	21,862	27,642
North Dakota	1,818	2,600	3,371	4,608	5,967	5,837
Ohio	38,595	46,433	72,087	108,779	107,807	121,148
Oklahoma	32,876	30,438	36,355	37,996	36,967	48,205
Oregon	11,834	15,055	16,579	23,934	19,210	21,825
Pennsylvania	31,317	37,041	55,520	81,219	82,150	90,648
Rhode Island	4,031	4,942	5,782	6,963	7,279	8,396
South Carolina	9,776	10,716	14,194	17,226	14,069	17,472
South Dakota	1,257	1,683	2,779	3,307	3,646	5,058
Tennessee	16,639	NA	NA	28,046	28,478	37,777
Texas	289,088	NA	264,352	262,333	257,136	319,453
Utah	5,585	8,109	12,336	12,602	15,610	16,835
Vermont	327	492	756	1,017	1,023	1,184
Virginia	17,342	NA	22,821	29,716	28,564	29,218
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	6,632	NA	NA	11,819	14,085
Wisconsin	17,359	19,893	28,656	43,163	43,687	61,193
Wyoming	4,069	4,924	5,792	6,234	NA	7,649
Total	**1,300,288**	**1,377,802**	**1,619,066**	**1,978,463**	**1,955,250**	**2,356,006**

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	298,102	24,023	20,725	20,081	21,745	24,088
Alaska	147,426	14,951	13,451	12,143	10,517	10,964
Arizona	134,871	14,397	9,456	10,331	10,952	13,311
Arkansas	254,142	20,624	16,270	16,098	21,593	23,043
California	1,933,371	192,210	154,589	151,911	162,464	164,775
Colorado	271,849	31,624	21,684	14,392	11,864	12,964
Connecticut	120,955	12,389	9,140	7,053	6,782	8,162
Delaware	40,769	3,965	3,593	2,875	2,860	3,235
District of Columbia	30,115	3,043	2,293	1,337	1,172	1,170
Florida	460,082	32,489	32,777	41,312	41,332	42,655
Georgia	349,701	34,095	27,346	20,377	17,928	24,063
Hawaii	2,654	568	183	172	180	195
Idaho	62,018	6,712	5,357	3,949	3,407	3,205
Illinois	944,563	119,098	90,335	58,216	44,732	44,698
Indiana	513,375	58,178	45,538	35,466	30,493	28,161
Iowa	223,826	25,924	20,513	14,848	11,617	11,796
Kansas	260,044	23,768	20,997	14,868	16,265	20,877
Kentucky	186,990	22,641	17,693	11,891	10,032	10,020
Louisiana	1,312,174	113,450	91,988	105,471	119,369	128,563
Maine	5,663	673	564	455	298	281
Maryland	176,323	19,719	14,642	10,097	10,384	11,208
Massachusetts	335,874	31,926	28,471	21,028	15,147	17,943
Michigan	813,457	91,646	71,928	49,532	35,851	34,403
Minnesota	305,174	40,732	30,299	20,231	14,566	14,455
Mississippi	201,209	15,567	12,925	12,317	17,247	19,131
Missouri	253,682	27,553	17,763	11,118	12,406	13,815
Montana	54,071	7,152	5,418	3,891	2,483	2,365
Nebraska	127,779	11,394	9,362	6,287	6,143	8,961
Nevada	142,970	15,265	11,777	11,255	10,223	13,454
New Hampshire	19,103	2,033	1,734	1,219	857	909
New Jersey	579,099	63,273	47,341	32,959	31,628	33,055
New Mexico	127,354	16,540	10,140	7,377	7,864	8,963
New York	1,135,250	104,380	84,394	68,342	66,050	85,071
North Carolina	206,129	18,480	15,666	11,738	12,824	14,096
North Dakota	40,782	4,686	3,807	2,199	2,231	2,153
Ohio	794,255	96,990	73,088	50,339	36,314	35,683
Oklahoma	483,117	39,100	31,825	33,453	44,090	48,570
Oregon	192,094	21,441	18,938	15,667	14,484	14,451
Pennsylvania	587,218	68,314	53,193	35,593	27,995	27,864
Rhode Island	85,811	6,701	6,093	5,105	4,453	6,287
South Carolina	153,476	13,758	12,286	10,471	10,756	10,940
South Dakota	29,383	3,735	2,813	1,279	1,297	1,541
Tennessee	263,778	28,282	21,151	17,009	15,757	15,925
Texas	3,634,920	329,660	276,571	281,344	320,315	349,628
Utah	139,380	19,111	12,732	10,647	7,354	6,552
Vermont	7,726	895	673	453	403	301
Virginia	234,692	24,576	20,099	16,212	15,119	15,975
Washington	254,067	26,180	22,554	14,778	19,336	20,249
West Virginia	104,879	11,105	9,102	6,858	5,594	5,542
Wisconsin	355,650	46,138	33,976	22,684	17,828	17,482
Wyoming	77,656	8,105	6,575	5,451	4,274	4,335
Total	**19,469,047**	**1,969,258**	**1,571,825**	**1,340,176**	**1,336,874**	**1,437,532**

See footnotes at end of table.

Table 19

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	23,312	23,855	23,888	24,090	29,526	29,777
Alaska	10,575	10,469	11,161	12,167	13,377	12,835
Arizona	12,061	7,474	7,585	10,135	12,037	12,207
Arkansas	21,240	20,839	20,817	20,986	24,350	22,660
California	147,533	119,820	139,639	153,492	151,820	189,723
Colorado	14,250	12,170	20,231	26,502	33,135	33,969
Connecticut	7,334	7,271	7,919	10,822	13,202	14,323
Delaware	3,134	2,836	2,927	3,300	4,042	3,787
District of Columbia	1,239	1,345	1,718	3,023	4,066	4,749
Florida	45,868	47,429	41,714	31,879	35,102	30,973
Georgia	24,012	25,597	22,830	27,346	39,449	41,570
Hawaii	179	194	181	194	185	202
Idaho	3,431	3,877	4,188	5,686	6,586	7,286
Illinois	42,354	45,603	50,910	79,423	116,883	107,469
Indiana	28,657	29,491	32,226	40,505	58,880	57,098
Iowa	11,485	10,720	12,466	18,593	27,912	25,419
Kansas	23,257	18,672	17,273	18,921	28,659	25,742
Kentucky	9,768	10,185	11,514	14,054	21,935	21,115
Louisiana	124,823	112,456	108,478	99,262	103,524	96,188
Maine	253	308	337	449	620	646
Maryland	10,038	9,691	10,561	14,208	20,887	21,605
Massachusetts	18,061	21,382	22,902	31,899	39,212	42,260
Michigan	33,947	42,173	49,710	76,362	104,471	105,054
Minnesota	13,686	14,631	14,641	21,694	37,498	36,392
Mississippi	18,881	18,772	17,516	14,967	17,903	17,461
Missouri	13,074	12,721	13,657	21,818	33,809	35,071
Montana	2,428	2,771	3,114	4,718	5,973	5,726
Nebraska	11,770	7,207	8,128	10,921	14,906	15,056
Nevada	12,962	9,487	10,190	11,365	11,591	12,074
New Hampshire	871	966	1,203	1,760	2,274	2,489
New Jersey	33,448	32,035	42,313	48,704	69,468	70,806
New Mexico	9,340	7,220	7,831	10,404	13,171	11,504
New York	83,660	74,133	77,734	93,844	122,304	129,654
North Carolina	12,467	14,893	14,034	17,142	22,510	25,144
North Dakota	2,039	2,393	2,856	3,609	4,590	4,674
Ohio	37,322	38,303	45,219	67,547	98,475	100,354
Oklahoma	47,424	41,299	33,829	33,633	43,974	40,968
Oregon	13,385	11,439	11,272	16,113	17,757	17,988
Pennsylvania	28,259	31,648	34,134	50,761	72,485	75,313
Rhode Island	6,773	6,027	7,384	8,225	8,828	9,365
South Carolina	10,154	11,297	11,457	12,168	15,419	16,930
South Dakota	1,597	1,209	2,115	2,270	3,623	3,459
Tennessee	14,959	15,388	17,452	21,560	30,477	32,052
Texas	372,879	320,689	292,221	263,728	286,872	253,041
Utah	6,674	6,965	7,596	12,265	14,752	16,708
Vermont	325	347	409	716	918	1,085
Virginia	15,194	14,715	14,539	17,980	25,062	27,395
Washington	15,353	12,987	12,226	23,319	29,291	28,946
West Virginia	5,524	5,794	6,493	9,439	12,681	12,699
Wisconsin	15,973	18,607	19,431	27,909	44,228	39,309
Wyoming	4,658	5,017	6,471	6,187	7,819	8,790
Total	**1,427,891**	**1,322,821**	**1,356,636**	**1,558,062**	**1,958,520**	**1,957,111**

NA Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				September	August	July	June	May
Alabama	2.91	3.15	3.85	3.61	3.62	3.33	3.53	2.86
Alaska	1.31	1.72	1.81	1.41	1.11	1.26	1.27	1.23
Arizona	2.61	2.61	3.19	3.66	3.52	3.26	3.16	3.03
Arkansas	NA	2.88	3.17	NA	2.98	3.04	NA	NA
California	2.46	2.33	2.96	3.00	2.80	2.51	2.57	2.71
Colorado	NA	2.39	2.89	NA	NA	NA	2.44	2.36
Connecticut	4.74	5.13	5.29	5.85	4.52	5.39	4.33	5.19
Delaware	3.64	2.78	3.39	4.01	3.53	4.43	5.10	3.91
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.26	3.37	3.88	3.60	3.53	3.22	3.27	3.27
Georgia	NA	3.44	4.07	NA	NA	3.42	4.10	NA
Hawaii	5.14	5.41	6.51	6.23	5.59	5.61	5.45	4.72
Idaho	1.97	1.97	2.22	3.27	2.74	2.72	1.50	1.69
Illinois	2.87	2.82	3.20	3.87	3.73	3.23	3.17	3.62
Indiana	NA	2.44	2.98	NA	NA	NA	NA	NA
Iowa	3.04	3.37	3.78	3.71	3.97	3.54	4.26	3.63
Kansas	NA	2.96	3.33	3.91	4.88	2.52	3.08	2.94
Kentucky	3.13	3.29	3.70	3.46	2.85	3.06	2.89	3.63
Louisiana	2.32	2.35	2.94	3.34	2.46	2.24	2.27	2.41
Maine	NA	3.48	4.23	2.69	3.18	5.39	3.67	NA
Maryland	NA	4.02	4.01	5.38	6.24	NA	5.86	NA
Massachusetts	NA	4.21	3.91	NA	NA	NA	NA	5.89
Michigan	2.81	2.79	2.90	2.83	2.79	2.83	2.63	2.83
Minnesota	2.87	2.98	3.42	3.72	3.52	3.30	3.23	2.87
Mississippi	NA	2.98	3.29	3.30	3.05	2.84	2.49	2.66
Missouri	3.30	3.45	3.79	5.38	5.25	5.14	4.90	4.56
Montana	2.44	2.42	3.30	2.30	2.12	2.08	2.20	1.37
Nebraska	2.98	3.03	3.79	3.28	2.33	3.25	3.24	3.45
Nevada	2.35	3.25	3.50	3.94	5.42	0.83	3.60	3.07
New Hampshire	3.66	3.81	4.20	4.12	3.96	4.77	4.06	3.32
New Jersey	NA	3.65	4.15	NA	NA	NA	NA	NA
New Mexico	2.09	2.07	2.52	2.51	2.34	2.06	2.13	2.06
New York	NA	2.57	3.16	NA	NA	NA	NA	NA
North Carolina	3.19	3.60	4.00	3.90	3.52	3.21	3.34	3.52
North Dakota	2.86	2.72	3.31	3.41	3.35	2.90	2.83	2.97
Ohio	NA	4.76	5.46	5.21	NA	5.07	5.81	6.71
Oklahoma	2.72	2.57	3.09	2.84	1.87	2.19	2.47	2.23
Oregon	2.84	2.81	2.61	3.64	4.05	3.74	3.28	2.84
Pennsylvania	3.63	4.36	4.07	4.98	6.70	5.13	4.35	4.28
Rhode Island	3.64	4.20	4.58	4.95	4.88	5.41	4.73	4.46
South Carolina	3.38	3.43	3.74	4.14	3.85	3.63	3.80	3.85
South Dakota	3.43	3.45	3.71	3.50	4.02	4.03	3.72	4.21
Tennessee	NA	3.53	3.44	3.53	4.18	3.25	2.75	2.81
Texas	2.72	2.62	3.58	2.98	2.98	2.77	2.78	2.86
Utah	2.81	3.20	2.58	3.23	2.93	4.04	2.62	2.07
Vermont	2.93	2.65	2.19	2.68	2.70	2.63	3.12	3.34
Virginia	NA	3.90	4.20	7.51	5.60	7.13	5.27	NA
Washington	NA	2.38	2.65	NA	NA	NA	NA	NA
West Virginia	NA	3.03	3.15	1.33	NA	3.16	NA	3.76
Wisconsin	2.98	3.42	3.70	4.26	4.14	3.84	4.12	3.62
Wyoming	3.18	2.45	3.06	3.99	3.81	3.51	2.53	3.01
Total	**3.00**	**3.08**	**3.53**	**3.50**	**3.39**	**3.13**	**3.20**	**3.25**

See footnotes at end of table.

Table 20

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999				1998			
	April	March	February	January	Total	December	November	October
Alabama	2.70	2.65	2.79	2.62	3.17	3.16	3.17	3.50
Alaska	1.32	1.33	1.34	1.32	1.72	1.73	1.74	1.73
Arizona	2.39	2.18	2.19	2.17	2.55	2.31	2.54	2.62
Arkansas	2.71	2.58	3.40	2.69	2.94	3.13	3.03	2.93
California	2.17	2.07	2.25	2.23	2.38	2.75	2.49	2.22
Colorado	1.14	1.84	2.07	2.25	2.40	2.74	2.18	2.24
Connecticut	4.87	4.57	4.74	4.44	5.06	5.51	4.54	4.31
Delaware	3.12	3.33	3.68	3.63	3.02	4.10	3.83	3.75
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.99	3.11	3.19	3.33	3.42	3.50	3.76	3.51
Georgia	3.11	3.33	3.45	4.41	3.51	4.34	3.24	3.08
Hawaii	4.68	4.53	4.47	5.07	5.33	5.17	5.14	4.95
Idaho	1.94	1.82	1.92	1.76	1.95	1.86	1.99	1.95
Illinois	2.63	2.51	2.59	2.49	2.77	2.75	2.65	2.43
Indiana	NA	NA	2.26	2.11	2.45	2.43	2.57	2.47
Iowa	3.03	2.77	3.02	2.63	3.34	2.79	3.05	4.98
Kansas	2.54	NA	NA	NA	2.96	2.79	3.19	2.94
Kentucky	3.72	2.79	3.10	3.21	3.23	3.08	3.19	2.94
Louisiana	2.14	2.16	2.19	2.18	2.33	2.48	2.20	2.13
Maine	5.48	3.05	2.84	3.27	3.43	3.82	2.66	3.37
Maryland	NA	NA	NA	2.87	4.12	5.70	3.38	4.15
Massachusetts	NA	NA	NA	NA	4.01	3.15	3.58	4.46
Michigan	2.75	2.79	3.02	2.79	2.80	3.05	2.86	2.61
Minnesota	2.49	2.70	2.84	2.60	2.98	3.04	3.04	2.74
Mississippi	NA	2.61	2.71	NA	3.00	3.11	3.06	2.91
Missouri	3.43	2.75	2.89	2.49	3.33	2.77	3.12	4.06
Montana	2.39	2.98	2.70	2.76	2.43	2.44	2.60	2.32
Nebraska	2.94	2.90	3.11	2.90	3.02	3.10	2.84	3.03
Nevada	2.13	2.31	2.54	2.42	3.02	2.65	2.60	2.48
New Hampshire	3.59	3.24	3.56	3.73	3.75	3.88	3.52	3.22
New Jersey	NA	1.20	NA	NA	3.71	4.84	4.10	4.08
New Mexico	1.81	1.98	2.08	2.13	2.08	2.18	2.17	1.75
New York	NA	NA	NA	NA	2.65	3.04	2.84	2.83
North Carolina	3.25	2.73	3.00	3.11	3.49	3.09	3.16	3.46
North Dakota	2.57	2.58	2.84	2.85	2.81	3.01	3.10	3.05
Ohio	7.73	4.43	4.62	4.22	4.70	4.32	4.22	6.02
Oklahoma	2.35	2.36	5.21	2.41	2.55	2.54	2.52	2.16
Oregon	2.66	2.59	2.68	2.43	2.73	2.50	2.61	2.72
Pennsylvania	3.77	2.95	3.42	3.10	4.12	3.47	3.69	3.73
Rhode Island	4.09	3.06	3.20	3.32	3.78	1.26	4.05	4.07
South Carolina	3.43	2.86	3.09	3.14	3.39	3.24	3.30	3.40
South Dakota	3.37	3.25	3.37	3.18	3.24	2.69	3.07	2.93
Tennessee	NA	2.79	2.76	2.86	3.47	3.28	3.57	3.06
Texas	2.45	2.38	2.61	2.83	2.63	2.85	2.59	2.37
Utah	2.31	2.76	3.11	2.86	3.22	3.58	3.07	2.94
Vermont	3.07	2.92	3.01	2.85	2.58	2.52	2.67	1.99
Virginia	3.70	3.35	2.97	3.31	3.74	3.28	3.31	3.80
Washington	NA	NA	NA	NA	2.34	2.38	1.79	2.46
West Virginia	NA	NA	4.00	6.98	3.17	3.80	3.55	3.22
Wisconsin	2.83	2.64	2.77	2.47	3.29	2.84	3.10	3.18
Wyoming	3.23	2.85	3.49	3.07	2.73	4.14	3.22	2.97
Total	**2.91**	**2.67**	**2.95**	**2.84**	**3.07**	**3.10**	**2.99**	**2.99**

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	September	August	July	June	May	April	March	February
Alabama	3.24	3.50	3.68	3.56	3.38	3.11	2.97	2.88
Alaska	1.71	1.71	1.64	1.67	1.68	1.71	1.73	1.72
Arizona	2.77	2.85	2.85	2.60	2.93	2.81	2.58	2.29
Arkansas	1.88	2.38	3.23	2.31	3.00	2.96	3.13	2.85
California	1.98	2.46	2.39	2.34	2.49	2.33	2.38	2.12
Colorado	0.63	2.26	2.09	2.43	2.46	2.64	2.45	2.56
Connecticut	4.69	4.87	5.14	4.74	5.08	5.89	4.87	5.24
Delaware	3.90	2.79	2.93	4.35	1.79	2.63	2.74	3.04
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.13	3.22	3.31	2.82	3.20	3.93	3.25	3.29
Georgia	3.37	3.44	3.57	3.01	3.55	3.63	3.85	3.18
Hawaii	5.12	5.06	4.77	4.86	5.21	5.21	6.25	5.75
Idaho	2.38	2.14	2.55	2.18	1.94	1.96	1.81	1.94
Illinois	2.24	2.49	3.16	2.16	3.64	2.90	2.86	2.90
Indiana	2.58	2.38	2.77	1.51	2.80	2.43	2.37	2.49
Iowa	4.00	4.03	4.05	1.99	4.12	3.33	3.42	3.33
Kansas	2.67	2.92	3.86	3.42	3.17	2.87	2.86	2.75
Kentucky	3.58	2.85	3.57	3.33	3.33	3.99	3.23	3.09
Louisiana	2.01	2.05	2.45	2.20	2.36	2.30	2.53	2.25
Maine	2.69	3.21	5.39	3.67	2.53	3.16	4.26	3.42
Maryland	13.58	5.83	7.57	5.89	5.54	4.37	3.39	3.40
Massachusetts	6.11	5.75	7.56	6.87	5.44	3.98	3.64	2.97
Michigan	2.69	2.79	2.92	2.50	2.69	2.78	2.97	2.89
Minnesota	2.78	3.06	3.31	2.97	3.28	2.95	3.00	2.90
Mississippi	2.65	2.67	3.07	2.86	2.88	3.18	3.07	2.99
Missouri	4.50	4.61	5.12	4.87	4.47	3.72	2.97	3.01
Montana	2.22	1.88	2.51	2.08	2.23	2.31	2.54	2.44
Nebraska	2.90	3.01	3.65	2.98	3.73	3.20	2.98	2.70
Nevada	3.79	4.43	3.75	3.37	3.25	3.00	3.29	3.00
New Hampshire	3.34	3.80	4.63	3.87	3.36	3.35	4.22	3.81
New Jersey	5.83	3.80	3.89	3.58	3.03	3.54	3.53	3.38
New Mexico	1.64	1.86	1.94	1.76	2.04	2.19	2.20	2.04
New York	2.56	2.44	2.85	2.84	3.11	3.27	2.01	3.32
North Carolina	3.20	3.43	3.95	3.83	3.66	3.91	3.49	3.47
North Dakota	2.11	2.49	2.57	2.34	2.74	2.86	2.91	2.83
Ohio	5.54	4.70	5.16	4.80	5.08	4.89	4.87	4.27
Oklahoma	2.73	2.61	2.38	2.51	2.46	2.36	2.38	2.61
Oregon	2.93	3.58	3.87	3.23	2.78	2.78	2.89	2.31
Pennsylvania	4.73	5.10	6.23	4.94	3.97	4.06	5.23	3.64
Rhode Island	4.30	4.66	4.82	4.69	4.68	4.26	4.05	4.03
South Carolina	3.35	3.46	3.96	3.65	3.81	3.58	3.29	3.00
South Dakota	3.91	4.68	4.27	2.90	4.42	4.37	2.60	3.66
Tennessee	2.42	2.77	3.12	3.10	3.40	6.62	2.61	3.84
Texas	2.09	2.35	2.62	2.36	2.65	2.68	2.65	2.61
Utah	3.37	3.48	2.64	2.73	2.62	2.89	3.23	3.68
Vermont	2.26	2.34	2.60	2.69	2.82	2.74	2.92	2.66
Virginia	4.86	5.14	4.96	4.32	4.37	3.92	3.25	3.63
Washington	2.37	2.20	2.16	2.60	2.37	2.60	2.28	2.43
West Virginia	2.58	2.43	2.76	2.91	3.43	3.60	2.69	3.21
Wisconsin	3.76	4.23	4.07	3.68	3.89	3.64	3.33	3.00
Wyoming	2.48	2.86	2.74	2.51	1.29	1.28	3.40	3.51
Total	**2.78**	**3.01**	**3.31**	**2.98**	**3.12**	**3.23**	**3.06**	**3.08**

NA Not Available.
— Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				September	August	July	June	May
Alabama	8.23	7.90	8.52	11.61	11.91	11.38	10.98	9.83
Alaska	3.69	3.68	3.82	3.84	4.27	4.31	4.10	3.81
Arizona	9.06	8.30	7.59	12.63	12.84	12.26	11.03	9.57
Arkansas	NA	6.81	6.70	NA	10.63	9.65	9.45	8.25
California	6.54	6.94	6.59	6.88	7.21	7.04	6.82	6.22
Colorado	NA	5.23	4.72	NA	NA	NA	6.13	5.12
Connecticut	10.31	10.52	10.37	10.95	11.45	11.73	11.86	11.30
Delaware	8.60	8.79	8.29	12.48	12.52	10.58	10.97	9.32
District of Columbia	NA	8.82	9.19	12.39	8.28	NA	8.24	8.95
Florida	11.77	11.05	11.66	14.65	14.31	13.77	13.34	12.64
Georgia	NA	7.95	8.08	NA	NA	11.45	10.16	NA
Hawaii	18.68	19.27	22.05	19.71	19.38	18.71	18.56	18.60
Idaho	5.32	5.33	5.09	6.58	6.55	6.21	5.83	5.46
Illinois	5.26	5.67	6.11	8.49	6.47	8.85	8.12	7.66
Indiana	NA	6.82	6.62	NA	NA	6.92	6.76	NA
Iowa	5.97	6.11	6.06	9.24	13.37	9.40	11.36	7.77
Kansas	NA	6.03	6.47	9.02	8.66	8.77	7.74	6.65
Kentucky	5.57	6.13	6.35	7.53	8.16	8.17	7.75	6.75
Louisiana	6.54	6.47	7.13	9.59	9.37	8.55	8.03	7.58
Maine	7.63	8.33	8.59	8.26	9.13	9.11	8.33	8.66
Maryland	NA	8.27	8.40	12.70	12.97	NA	11.87	NA
Massachusetts	NA	9.35	9.36	NA	NA	NA	NA	NA
Michigan	5.14	5.25	5.21	7.15	7.75	7.68	6.46	5.72
Minnesota	5.47	5.54	5.77	7.47	7.91	8.04	7.19	6.26
Mississippi	NA	6.08	6.33	6.99	7.77	7.22	7.12	6.92
Missouri	6.15	6.54	6.53	9.35	10.48	9.85	6.09	7.08
Montana	5.11	5.25	4.88	6.27	7.46	6.58	5.99	4.66
Nebraska	4.89	5.21	5.54	7.73	8.04	7.13	6.76	5.39
Nevada	7.23	7.12	6.16	8.85	9.03	8.86	8.15	7.39
New Hampshire	7.46	8.17	8.50	8.75	9.29	8.68	7.88	6.38
New Jersey	NA	7.01	7.98	NA	NA	NA	NA	NA
New Mexico	4.40	5.85	6.74	6.68	6.68	9.96	10.62	9.45
New York	NA	9.53	9.66	NA	NA	NA	NA	NA
North Carolina	8.05	8.52	9.23	11.70	13.19	11.74	12.98	8.76
North Dakota	5.07	5.17	4.69	7.31	7.90	7.54	7.23	5.19
Ohio	NA	6.43	6.88	8.04	NA	8.41	7.89	6.83
Oklahoma	5.52	5.89	6.32	9.13	9.49	8.80	3.77	6.95
Oregon	7.16	6.76	6.22	8.64	8.91	10.50	7.75	7.26
Pennsylvania	8.28	8.58	8.46	10.69	11.99	11.40	10.69	9.19
Rhode Island	9.42	9.49	9.67	12.23	12.29	11.52	11.36	9.79
South Carolina	8.52	8.14	8.57	10.20	10.46	10.20	9.89	8.48
South Dakota	5.64	5.70	5.58	8.26	9.81	8.69	8.46	6.48
Tennessee	NA	6.64	6.96	8.06	9.25	8.86	9.32	NA
Texas	5.88	6.20	6.38	9.00	9.13	7.40	7.90	6.94
Utah	5.29	5.63	5.05	5.44	6.25	5.54	5.78	4.83
Vermont	6.97	6.50	6.40	9.33	9.38	9.33	8.42	7.41
Virginia	NA	8.60	8.60	14.20	16.51	13.85	13.36	NA
Washington	NA	5.85	5.59	NA	NA	NA	NA	NA
West Virginia	NA	7.25	7.13	9.61	NA	10.66	NA	NA
Wisconsin	6.17	6.23	6.39	7.21	7.45	7.14	6.70	5.91
Wyoming	5.26	5.26	4.18	6.09	6.63	6.74	5.94	5.08
Total	**6.51**	**6.90**	**6.99**	**8.38**	**8.61**	**8.45**	**7.91**	**7.07**

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999				1998			
	April	March	February	January	Total	December	November	October
Alabama	7.83	7.03	8.29	7.13	8.21	9.06	10.01	10.99
Alaska	3.65	3.59	3.53	3.53	3.67	3.51	3.70	3.74
Arizona	8.75	8.57	8.17	8.03	8.50	8.34	9.85	11.96
Arkansas	6.70	6.16	6.94	5.66	6.85	6.82	6.79	8.12
California	5.98	6.22	6.54	6.82	6.92	6.88	6.79	6.87
Colorado	5.00	4.86	4.75	4.60	5.22	4.94	5.28	5.85
Connecticut	10.29	10.08	10.18	9.71	10.60	10.97	10.52	11.13
Delaware	8.39	8.05	8.10	8.05	8.90	8.58	9.44	11.69
District of Columbia	7.96	7.76	8.25	8.61	8.91	8.82	9.25	10.60
Florida	11.46	10.58	11.16	10.29	11.29	11.35	12.43	13.68
Georgia	4.12	2.44	2.38	2.01	6.78	2.42	3.45	8.03
Hawaii	18.04	18.15	18.34	18.79	19.25	18.86	19.39	19.25
Idaho	5.31	5.10	5.13	5.03	5.33	5.15	5.42	5.79
Illinois	5.27	4.63	4.62	4.46	5.47	4.77	5.02	5.98
Indiana	NA	NA	NA	5.36	6.56	5.75	5.81	6.72
Iowa	6.00	5.26	5.07	4.79	5.96	4.96	5.75	7.39
Kansas	5.60	NA	NA	NA	6.00	5.52	5.88	7.43
Kentucky	5.46	4.82	5.27	5.24	6.03	5.35	5.76	7.99
Louisiana	6.19	5.98	5.86	5.42	6.68	6.89	7.81	8.90
Maine	7.85	7.38	7.34	7.00	8.09	7.64	7.45	7.66
Maryland	7.98	NA	NA	7.37	8.29	8.12	7.92	10.06
Massachusetts	NA	NA	9.19	9.39	9.42	9.67	9.66	9.44
Michigan	5.10	4.78	4.76	4.68	5.17	4.87	4.85	5.43
Minnesota	5.21	5.08	5.06	4.96	5.48	5.22	5.31	6.02
Mississippi	NA	5.20	5.94	4.84	6.08	6.44	4.48	7.74
Missouri	6.06	5.41	5.70	5.71	6.57	6.20	6.63	8.85
Montana	4.95	4.94	4.93	4.75	5.25	4.99	5.22	5.84
Nebraska	4.70	4.47	4.38	4.37	5.13	4.60	4.74	5.71
Nevada	7.00	6.94	6.75	6.70	7.11	6.74	7.14	8.00
New Hampshire	5.67	8.23	7.60	7.44	8.12	7.98	8.26	7.29
New Jersey	NA	NA	NA	NA	7.33	8.16	8.24	8.51
New Mexico	4.97	3.09	4.25	2.63	5.22	3.23	4.20	8.02
New York	NA	NA	NA	NA	9.59	9.30	9.50	11.62
North Carolina	7.92	6.20	8.40	7.56	8.69	9.45	8.31	11.70
North Dakota	4.71	4.76	4.67	4.62	5.16	5.01	5.05	5.65
Ohio	5.83	5.63	5.69	5.87	6.43	6.08	6.13	7.82
Oklahoma	5.59	5.33	5.48	4.45	5.93	5.51	6.15	8.42
Oregon	7.04	6.91	6.80	6.68	6.81	6.75	6.91	7.66
Pennsylvania	7.68	7.73	7.78	7.80	8.45	7.78	8.07	9.13
Rhode Island	9.48	8.88	8.90	8.71	9.56	9.40	9.80	10.79
South Carolina	8.17	7.81	9.14	8.25	8.30	8.95	8.77	9.56
South Dakota	5.43	5.00	5.09	4.89	5.59	4.99	5.35	6.34
Tennessee	NA	6.36	6.06	5.71	6.73	6.74	7.04	8.58
Texas	6.00	5.18	5.20	4.89	6.16	5.40	6.43	7.98
Utah	4.19	5.59	5.33	5.51	5.57	5.61	5.72	4.74
Vermont	6.83	6.68	6.29	6.64	6.54	6.38	6.64	7.46
Virginia	8.72	7.34	7.98	7.96	8.57	8.09	8.10	10.85
Washington	NA	NA	NA	NA	5.84	5.79	5.63	6.09
West Virginia	NA	NA	6.96	6.90	7.29	7.18	7.34	8.19
Wisconsin	6.13	6.05	6.28	5.82	6.15	6.00	6.22	5.48
Wyoming	5.03	5.19	5.03	4.98	5.19	4.91	5.11	5.10
Total	**6.32**	**6.00**	**6.23**	**5.97**	**6.82**	**6.34**	**6.58**	**7.60**

See footnotes at end of table.

Table 21

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	September	August	July	June	May	April	March	February
Alabama	10.77	10.84	11.17	10.95	9.01	7.80	7.05	7.16
Alaska	3.01	3.75	4.71	4.02	3.83	3.66	3.71	3.65
Arizona	12.93	13.11	12.17	10.95	9.52	8.09	7.35	7.36
Arkansas	8.80	8.98	9.02	8.71	7.58	6.42	6.41	6.50
California	7.00	7.20	7.06	7.31	7.00	6.79	6.77	6.48
Colorado	8.50	7.56	6.43	16.25	5.33	4.82	4.57	4.65
Connecticut	11.75	11.82	11.64	11.12	11.59	9.79	10.19	10.34
Delaware	12.86	12.69	11.74	11.06	9.50	8.56	8.18	8.11
District of Columbia	11.17	8.55	8.83	8.46	9.66	8.82	8.58	8.40
Florida	13.65	13.59	13.53	13.02	12.67	10.69	9.96	9.88
Georgia	15.61	16.04	16.85	11.80	13.61	7.14	5.81	6.18
Hawaii	19.39	18.29	18.58	18.73	19.00	19.19	19.63	20.44
Idaho	6.54	6.70	6.25	5.85	5.58	5.37	5.17	5.13
Illinois	8.08	8.18	8.71	8.11	7.96	5.81	4.95	4.92
Indiana	8.71	9.50	9.62	8.79	8.88	7.16	6.14	6.27
Iowa	11.08	10.95	11.75	8.48	7.87	6.42	4.84	5.02
Kansas	7.95	7.85	7.75	7.39	6.50	5.83	5.67	5.68
Kentucky	9.44	10.07	8.11	8.64	7.23	6.63	5.31	5.53
Louisiana	8.78	8.71	8.72	8.26	8.69	6.46	5.31	5.53
Maine	8.94	9.19	9.17	8.38	8.72	8.81	7.95	8.27
Maryland	11.22	11.50	12.01	10.81	9.84	8.35	7.52	7.35
Massachusetts	10.84	11.29	10.44	9.24	8.81	9.54	9.24	9.12
Michigan	7.03	7.42	7.19	6.29	5.91	5.16	4.74	4.97
Minnesota	7.05	7.33	7.58	7.16	6.57	5.63	5.19	5.12
Mississippi	7.80	7.84	7.84	7.56	6.66	6.09	5.44	5.59
Missouri	9.87	10.95	9.90	8.85	7.41	6.15	5.59	5.87
Montana	6.97	6.99	6.38	6.07	5.76	5.10	4.92	4.97
Nebraska	6.87	7.08	6.83	6.35	5.96	5.06	4.71	4.90
Nevada	9.25	9.27	8.69	7.74	7.30	6.90	6.80	6.79
New Hampshire	8.91	9.32	9.03	8.18	6.84	6.38	9.29	8.39
New Jersey	9.12	9.07	8.76	8.47	6.26	7.03	6.74	6.60
New Mexico	10.26	10.64	10.97	31.45	9.76	6.30	4.58	5.27
New York	12.66	13.24	7.08	11.99	10.73	9.56	8.90	9.09
North Carolina	12.53	13.25	12.02	11.78	9.26	7.89	7.75	7.91
North Dakota	7.64	9.81	7.04	6.98	5.92	5.09	4.76	4.65
Ohio	9.07	9.89	8.25	7.37	6.58	6.22	5.97	5.75
Oklahoma	9.25	9.09	8.67	8.14	6.55	5.39	5.29	5.58
Oregon	8.82	9.21	8.43	7.51	7.21	6.52	6.49	6.47
Pennsylvania	11.13	11.82	11.70	10.63	9.53	8.53	7.96	7.95
Rhode Island	12.16	12.15	11.95	10.95	9.68	9.51	9.04	8.87
South Carolina	10.05	10.29	10.13	9.70	8.21	7.65	7.79	8.11
South Dakota	8.38	8.63	8.90	6.54	6.89	5.88	5.31	5.07
Tennessee	8.87	9.44	9.12	8.46	7.36	6.82	6.36	5.47
Texas	8.59	8.77	8.66	7.76	7.15	6.15	5.02	6.43
Utah	6.08	6.95	6.64	5.34	5.67	4.81	5.46	5.68
Vermont	5.12	8.77	8.91	8.08	7.28	6.45	6.30	6.23
Virginia	12.39	12.60	12.09	11.60	10.03	8.44	7.66	7.96
Washington	6.20	6.22	6.12	5.99	5.90	5.82	5.81	5.80
West Virginia	9.82	10.54	10.67	9.81	8.16	7.51	6.81	6.70
Wisconsin	6.56	6.73	7.36	6.63	6.36	6.08	6.35	6.04
Wyoming	6.60	7.03	6.29	5.80	5.59	5.12	4.97	5.00
Total	**8.96**	**9.25**	**8.53**	**8.51**	**7.70**	**6.81**	**6.29**	**6.41**

NA Not Available.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				September	August	July	June	May
Alabama	6.63	6.53	7.06	7.22	7.31	7.22	7.08	6.86
Alaska	2.17	2.40	2.40	1.94	1.79	1.83	1.76	1.95
Arizona	6.15	5.89	5.20	6.27	6.38	6.13	6.05	6.07
Arkansas	NA	5.15	5.19	NA	5.77	5.69	NA	NA
California	5.68	6.45	6.26	5.96	6.08	5.68	5.43	5.24
Colorado	NA	4.44	3.92	NA	NA	NA	4.38	4.18
Connecticut	6.40	6.91	7.21	5.27	4.91	5.13	5.39	6.51
Delaware	6.98	7.03	6.65	8.20	8.78	8.29	7.89	7.31
District of Columbia	NA	7.29	7.95	8.14	6.92	NA	6.84	6.64
Florida	6.39	6.45	6.73	6.90	6.66	6.47	6.26	6.29
Georgia	NA	6.68	6.74	NA	NA	6.55	5.99	NA
Hawaii	13.83	14.22	14.98	14.90	14.45	14.46	14.00	13.28
Idaho	4.68	4.59	4.48	5.25	4.96	4.89	4.92	4.85
Illinois	4.99	5.15	5.47	7.26	6.80	7.98	7.15	6.61
Indiana	NA	5.74	5.62	NA	NA	5.07	NA	NA
Iowa	4.62	4.79	5.08	5.80	6.19	6.25	6.44	5.51
Kansas	NA	4.94	5.38	4.78	4.92	5.48	5.85	5.54
Kentucky	4.86	5.51	5.75	5.60	4.35	5.75	5.59	4.36
Louisiana	5.52	5.52	6.12	6.49	6.23	5.79	5.56	5.56
Maine	6.77	7.43	7.77	6.89	6.89	6.81	6.70	7.20
Maryland	NA	6.59	6.54	8.76	7.34	NA	8.29	NA
Massachusetts	NA	7.34	7.31	NA	NA	NA	6.12	6.24
Michigan	4.86	4.94	4.99	5.71	6.08	5.86	5.67	5.14
Minnesota	4.33	4.43	4.80	5.02	4.65	4.50	4.61	4.38
Mississippi	NA	4.79	5.17	4.62	4.88	4.45	4.44	NA
Missouri	5.30	5.69	5.78	5.58	5.81	5.68	3.63	5.22
Montana	5.03	5.10	4.77	5.87	6.54	5.99	5.63	4.60
Nebraska	4.01	4.39	4.74	4.36	4.11	3.84	3.94	3.88
Nevada	6.07	6.21	4.99	6.50	6.33	6.49	6.40	6.09
New Hampshire	NA	7.22	7.69	6.19	6.32	6.16	5.98	NA
New Jersey	NA	3.89	6.15	NA	NA	NA	NA	NA
New Mexico	3.51	4.34	4.69	4.24	3.91	4.41	5.59	5.25
New York	NA	6.19	6.52	NA	NA	NA	NA	NA
North Carolina	6.08	6.56	7.10	6.13	6.28	6.13	6.12	5.85
North Dakota	4.22	4.38	4.09	5.21	4.97	5.07	4.98	3.94
Ohio	NA	5.80	6.34	6.17	NA	6.60	6.55	5.82
Oklahoma	4.93	5.14	5.38	5.28	5.36	5.43	5.98	4.98
Oregon	5.66	5.22	4.61	5.95	5.98	5.83	5.75	5.65
Pennsylvania	8.86	7.64	7.52	7.70	8.21	7.83	8.96	7.09
Rhode Island	8.03	8.10	8.27	8.58	14.12	8.91	8.70	8.45
South Carolina	6.41	6.48	6.59	6.12	6.01	5.90	6.00	6.04
South Dakota	4.32	4.52	4.53	5.56	5.99	5.29	5.37	4.91
Tennessee	NA	5.92	6.03	5.08	5.89	5.79	5.48	5.39
Texas	4.30	4.50	4.85	4.70	4.31	4.02	4.37	4.16
Utah	3.95	4.28	3.68	3.99	4.10	4.19	3.85	3.31
Vermont	5.39	5.18	5.23	5.68	5.76	5.72	5.64	5.57
Virginia	NA	6.12	6.46	6.50	7.49	6.22	5.79	NA
Washington	NA	4.71	4.69	NA	NA	NA	NA	NA
West Virginia	NA	6.31	6.37	6.65	NA	6.76	NA	6.86
Wisconsin	4.84	4.78	5.26	5.50	4.98	4.68	4.64	4.28
Wyoming	4.49	4.85	3.51	4.36	4.41	4.47	4.53	4.51
Total	**5.20**	**5.57**	**5.81**	**5.40**	**5.28**	**5.23**	**5.23**	**5.14**

See footnotes at end of table.

Table 22

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999				1998			
	April	March	February	January	Total	December	November	October
Alabama	6.26	6.10	6.93	6.33	6.65	7.07	7.40	6.94
Alaska	2.28	2.34	2.38	2.44	2.41	2.46	2.48	2.33
Arizona	6.11	6.12	6.18	6.15	6.00	6.31	6.44	6.51
Arkansas	5.24	4.85	5.27	4.70	5.16	5.28	5.17	4.91
California	5.57	5.17	6.28	5.82	6.33	6.38	6.08	5.73
Colorado	NA	4.14	4.12	4.15	4.34	4.21	3.86	3.94
Connecticut	6.68	6.93	7.03	6.63	6.89	7.60	6.79	5.54
Delaware	6.82	6.69	6.59	6.68	7.05	6.89	6.93	8.05
District of Columbia	6.70	6.92	7.06	7.53	7.36	7.67	7.65	7.45
Florida	6.19	6.22	6.42	6.41	6.40	6.23	6.27	6.28
Georgia	3.43	2.17	2.35	3.78	6.00	2.77	3.36	4.95
Hawaii	13.08	13.19	13.41	13.79	14.15	13.81	14.00	14.04
Idaho	4.83	4.49	4.59	4.46	4.62	4.59	4.84	4.92
Illinois	4.83	4.46	4.48	4.47	5.07	4.69	4.88	5.32
Indiana	NA	NA	4.52	4.39	5.50	4.72	4.89	5.33
Iowa	4.67	4.11	4.30	4.12	4.67	4.06	4.52	5.15
Kansas	4.91	NA	NA	NA	4.98	5.11	5.10	5.34
Kentucky	5.03	4.39	4.93	4.98	5.43	5.12	5.16	5.78
Louisiana	5.24	5.29	5.22	5.25	5.64	6.02	6.15	6.07
Maine	7.01	6.81	6.79	6.48	7.23	6.96	6.68	6.55
Maryland	7.03	NA	NA	6.49	6.64	7.11	6.07	7.71
Massachusetts	7.79	7.72	NA	8.08	7.32	7.68	7.49	6.06
Michigan	4.94	4.69	4.68	4.65	4.90	4.78	4.70	5.12
Minnesota	4.01	4.20	4.25	4.33	4.39	4.37	4.26	4.22
Mississippi	NA	4.25	4.95	NA	4.74	5.04	3.72	4.78
Missouri	5.19	5.06	5.43	5.55	5.68	5.60	5.50	6.17
Montana	4.88	4.90	4.91	4.80	5.13	5.01	5.19	5.68
Nebraska	3.77	3.98	4.00	4.14	4.25	3.77	3.74	3.50
Nevada	6.10	5.89	5.92	5.85	6.28	6.22	6.69	6.99
New Hampshire	5.40	6.97	7.15	6.89	7.18	7.38	7.30	5.94
New Jersey	NA	NA	NA	NA	3.70	3.15	3.22	3.14
New Mexico	4.08	3.53	3.40	2.45	4.04	3.15	3.42	4.16
New York	NA	NA	NA	NA	6.08	6.05	5.61	5.40
North Carolina	5.62	5.87	6.44	6.25	6.63	7.16	6.90	6.24
North Dakota	3.94	4.09	4.04	4.19	4.37	4.33	4.35	4.43
Ohio	5.37	5.26	5.33	5.67	5.83	5.69	5.70	6.92
Oklahoma	4.70	5.09	5.23	4.49	5.05	4.10	6.05	5.18
Oregon	5.65	5.63	5.64	5.51	5.25	5.96	4.39	5.48
Pennsylvania	19.91	7.00	7.22	7.26	7.43	6.82	6.70	7.41
Rhode Island	8.03	7.73	7.75	7.74	8.12	8.02	8.11	8.65
South Carolina	6.45	6.40	6.94	6.75	6.48	6.77	6.61	5.76
South Dakota	4.23	3.90	4.16	3.92	4.43	3.98	4.25	4.86
Tennessee	NA	5.68	5.72	5.67	6.04	6.40	6.34	6.87
Texas	4.47	4.04	4.29	4.36	4.44	4.30	4.27	4.20
Utah	3.24	4.25	4.14	4.20	4.35	4.53	4.68	3.99
Vermont	5.50	5.49	5.23	5.12	5.08	4.72	4.95	4.81
Virginia	5.82	5.67	6.04	5.81	6.12	6.02	6.11	6.33
Washington	NA	NA	NA	NA	4.75	4.68	5.32	4.77
West Virginia	6.06	6.19	6.23	6.23	6.26	5.97	6.30	6.36
Wisconsin	4.41	4.77	4.89	5.04	4.70	4.68	4.71	3.81
Wyoming	4.44	4.51	4.47	4.55	4.45	2.85	4.65	4.81
Total	**5.70**	**5.00**	**5.17**	**5.08**	**5.48**	**5.23**	**5.22**	**5.31**

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	September	August	July	June	May	April	March	February
Alabama	6.80	6.85	7.11	7.11	6.70	6.42	6.16	6.36
Alaska	3.23	2.15	2.08	2.05	2.24	2.32	2.40	2.46
Arizona	5.83	6.36	6.31	6.25	6.20	5.84	5.55	5.64
Arkansas	5.03	5.00	5.30	5.17	5.32	5.20	5.05	5.20
California	5.93	5.98	5.59	6.01	5.77	6.76	7.18	6.86
Colorado	4.59	4.40	4.91	4.84	4.58	4.35	4.33	4.37
Connecticut	5.48	5.57	4.69	5.92	7.08	6.91	7.47	7.33
Delaware	8.72	8.40	8.14	7.81	7.33	6.85	6.70	6.68
District of Columbia	7.32	7.11	6.95	6.94	6.96	7.06	7.42	7.31
Florida	6.12	6.14	6.37	6.48	6.57	6.45	6.68	6.47
Georgia	9.16	9.03	9.51	7.66	8.09	5.70	5.57	5.92
Hawaii	16.65	10.88	13.40	13.53	14.07	14.19	14.48	15.61
Idaho	4.95	4.89	4.91	4.84	4.78	4.77	4.47	4.41
Illinois	6.10	6.41	8.18	6.25	6.84	5.26	4.72	4.68
Indiana	6.19	6.57	6.41	6.10	6.40	6.14	5.35	5.54
Iowa	6.54	6.44	7.71	4.27	5.79	5.32	3.81	4.18
Kansas	5.50	4.30	5.35	5.51	5.61	5.94	3.76	5.26
Kentucky	5.79	5.83	6.34	5.91	5.27	5.60	5.38	5.58
Louisiana	5.79	5.64	5.81	5.55	6.30	5.54	4.96	5.16
Maine	6.89	6.89	6.81	6.70	7.20	7.89	7.67	7.64
Maryland	7.27	7.40	7.89	7.13	7.48	7.06	6.17	6.07
Massachusetts	6.19	6.48	6.24	6.19	6.48	7.54	7.78	7.68
Michigan	5.42	5.78	5.96	5.45	5.28	4.98	4.64	4.82
Minnesota	3.92	4.43	4.65	4.45	4.63	4.52	4.40	4.41
Mississippi	3.85	4.35	4.50	4.48	4.93	5.18	4.95	4.60
Missouri	5.71	6.04	6.01	5.65	5.52	5.40	5.30	5.66
Montana	6.19	6.18	5.78	5.79	5.50	5.01	4.87	4.93
Nebraska	3.31	3.51	3.68	3.67	4.00	4.16	5.77	4.18
Nevada	7.32	7.30	6.43	6.25	6.08	6.09	6.02	6.09
New Hampshire	6.40	6.70	6.59	6.45	5.98	6.18	7.92	7.89
New Jersey	2.98	2.79	3.85	3.61	3.70	4.03	3.70	3.99
New Mexico	4.50	4.70	4.85	6.44	5.16	4.51	4.02	4.45
New York	5.64	4.59	5.49	5.15	6.36	6.55	6.15	6.79
North Carolina	6.27	6.29	6.46	6.17	6.19	6.10	6.46	6.73
North Dakota	4.77	7.34	4.76	4.90	4.58	4.19	4.20	4.16
Ohio	7.03	7.75	6.15	6.26	5.72	5.75	5.58	5.39
Oklahoma	5.22	5.18	5.22	5.08	4.80	4.43	5.11	5.39
Oregon	5.50	5.86	5.71	5.48	5.45	5.16	5.13	5.13
Pennsylvania	8.06	8.32	8.22	8.24	8.50	7.91	7.42	7.44
Rhode Island	9.14	9.35	8.98	8.88	8.37	8.10	7.88	7.78
South Carolina	5.91	5.93	5.91	5.98	5.94	6.42	6.58	7.00
South Dakota	5.67	5.62	6.25	4.34	5.09	4.71	4.38	4.11
Tennessee	5.85	6.27	5.98	5.96	5.89	5.98	5.97	4.97
Texas	4.19	4.06	4.17	3.98	5.21	4.60	4.19	5.18
Utah	4.42	4.80	4.36	3.92	3.92	3.75	4.35	4.34
Vermont	4.63	5.17	4.91	5.30	5.98	5.14	5.10	5.23
Virginia	6.24	6.63	5.91	6.33	5.59	5.74	5.89	6.34
Washington	4.85	4.91	4.90	4.82	4.73	4.68	4.68	4.67
West Virginia	6.29	6.71	7.10	7.03	7.47	6.37	6.15	6.18
Wisconsin	4.12	4.45	4.79	4.34	4.07	4.56	5.05	4.77
Wyoming	4.89	5.95	5.19	5.12	4.87	4.73	4.71	4.79
Total	**5.49**	**5.46**	**5.64**	**5.51**	**5.73**	**5.64**	**5.40**	**5.59**

NA Not Available.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				September	August	July	June	May
Alabama	3.25	3.28	3.58	3.59	3.33	3.06	3.15	3.30
Alaska	1.21	1.38	1.54	1.16	1.33	1.27	1.24	1.21
Arizona	3.38	3.28	3.68	3.48	3.29	3.26	3.62	3.11
Arkansas	NA	3.49	3.58	3.84	3.92	3.64	NA	3.57
California	NA	3.83	3.97	2.44	3.67	3.48	3.34	2.86
Colorado	NA	1.62	0.73	NA	NA	NA	2.41	2.46
Connecticut	4.03	4.38	4.68	3.92	3.82	3.54	3.70	3.70
Delaware	4.06	4.28	4.27	4.64	4.25	4.16	4.11	3.48
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.94	4.00	4.28	4.35	4.20	3.99	4.11	3.92
Georgia	NA	4.23	4.59	NA	NA	4.12	3.46	NA
Hawaii	8.19	—	—	8.28	8.04	8.04	8.31	8.52
Idaho	3.25	3.10	2.77	3.23	3.22	3.59	3.21	3.22
Illinois	3.78	4.11	3.86	4.56	4.05	4.17	4.03	3.85
Indiana	NA	4.45	4.45	NA	NA	NA	NA	NA
Iowa	3.64	3.33	3.93	4.59	3.96	2.30	6.02	3.52
Kansas	NA	3.19	3.17	2.83	2.59	2.52	2.51	NA
Kentucky	3.14	4.09	4.02	3.36	3.26	2.99	2.90	3.09
Louisiana	2.13	2.53	2.75	2.53	2.41	2.28	2.07	1.98
Maine	4.81	5.15	5.40	3.92	3.80	4.17	4.10	4.61
Maryland	NA	5.57	3.44	6.78	4.48	5.74	6.00	NA
Massachusetts	NA	5.74	5.70	NA	NA	NA	NA	4.50
Michigan	3.91	3.94	4.01	4.51	4.81	5.11	4.46	3.83
Minnesota	2.77	2.91	3.14	3.47	2.68	2.87	2.27	3.07
Mississippi	NA	3.27	3.43	3.63	3.36	3.09	3.09	3.18
Missouri	NA	4.43	4.52	4.13	3.92	3.69	3.91	4.00
Montana	4.53	4.74	4.78	5.71	6.07	5.67	5.99	4.33
Nebraska	3.27	3.28	3.68	3.68	3.50	3.16	3.41	3.14
Nevada	4.59	5.10	7.21	4.83	4.79	4.71	4.76	4.62
New Hampshire	4.12	4.75	4.60	3.78	3.66	3.49	3.69	1.79
New Jersey	NA	3.14	3.71	NA	NA	NA	NA	NA
New Mexico	NA	3.48	3.38	2.89	2.14	3.39	3.35	3.36
New York	NA	4.19	4.93	4.84	NA	NA	NA	NA
North Carolina	3.36	3.98	4.58	3.77	3.10	3.03	3.22	3.07
North Dakota	2.65	2.85	2.92	3.24	3.00	2.73	2.59	2.77
Ohio	NA	4.41	4.99	5.11	NA	6.61	5.45	3.45
Oklahoma	3.56	3.71	4.02	3.52	3.32	3.48	3.45	4.73
Oregon	2.63	3.70	2.99	4.08	4.01	3.93	3.94	3.96
Pennsylvania	4.17	4.20	4.65	3.97	3.83	3.77	3.80	3.92
Rhode Island	3.75	3.82	4.26	4.19	2.61	3.33	3.29	3.74
South Carolina	3.15	3.31	3.59	3.74	3.45	3.10	3.22	3.07
South Dakota	3.23	3.35	3.96	3.85	3.51	3.53	3.54	3.26
Tennessee	NA	3.94	4.00	2.20	2.77	2.69	3.31	3.19
Texas	NA	2.35	2.64	2.97	2.86	2.53	2.41	NA
Utah	2.97	2.96	2.42	2.93	2.85	2.85	2.86	2.92
Vermont	2.85	2.88	3.07	3.23	3.02	2.83	2.82	2.80
Virginia	NA	3.91	4.71	NA	4.23	3.39	3.49	NA
Washington	NA	2.73	3.16	NA	NA	NA	NA	NA
West Virginia	NA	3.38	2.90	3.58	NA	2.84	NA	2.68
Wisconsin	3.74	3.81	3.92	4.07	3.73	3.30	3.53	3.41
Wyoming	NA	3.38	3.46	NA	NA	NA	3.20	3.66
Total	**2.83**	**3.20**	**3.45**	**3.09**	**2.84**	**2.67**	**2.64**	**2.65**

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999				1998			
	April	March	February	January	Total	December	November	October
Alabama	3.24	3.05	3.34	3.24	3.30	3.59	3.32	3.28
Alaska	1.18	1.17	1.18	1.20	1.34	1.22	1.22	1.22
Arizona	3.26	3.71	3.42	3.48	3.26	3.38	3.24	2.99
Arkansas	3.35	3.42	3.48	3.40	3.48	3.78	3.33	3.25
California	3.12	3.09	NA	4.02	3.77	3.70	3.60	2.83
Colorado	2.28	2.16	2.32	2.41	2.61	0.93	1.17	1.22
Connecticut	3.98	4.23	4.39	4.49	4.34	4.55	4.22	3.88
Delaware	4.27	4.00	3.93	4.33	4.13	3.68	3.79	3.70
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.82	3.66	3.92	3.82	3.98	3.74	3.94	3.91
Georgia	3.39	2.76	2.64	2.55	3.92	2.18	2.55	3.20
Hawaii	8.02	8.10	8.07	8.41	—	8.64	—	—
Idaho	3.26	3.14	3.23	3.19	3.09	3.08	3.16	3.02
Illinois	3.17	3.50	3.71	3.81	3.96	3.82	3.63	3.34
Indiana	NA	NA	3.01	NA	4.28	4.06	3.84	3.34
Iowa	3.27	3.33	3.52	3.32	3.49	3.57	3.83	3.71
Kansas	2.97	2.98	3.25	NA	3.17	3.26	3.17	2.86
Kentucky	2.90	3.10	3.35	3.17	4.00	3.97	3.42	3.94
Louisiana	1.89	1.88	1.95	2.12	2.31	1.65	2.35	2.30
Maine	6.11	5.76	6.05	5.20	5.13	6.13	4.97	4.26
Maryland	3.80	4.25	6.65	6.18	5.26	5.22	4.74	4.14
Massachusetts	NA	NA	6.88	4.62	5.69	6.45	5.60	4.23
Michigan	3.69	3.76	3.66	3.92	3.91	3.88	3.53	4.20
Minnesota	2.52	2.67	2.81	2.86	2.88	2.96	2.77	2.63
Mississippi	NA	2.99	3.12	NA	3.22	3.32	2.77	3.05
Missouri	3.97	4.00	NA	4.74	4.51	3.83	4.28	4.02
Montana	4.79	4.79	4.78	3.40	4.68	4.21	4.64	4.84
Nebraska	3.05	3.21	3.12	3.35	3.26	3.33	3.31	2.89
Nevada	4.51	4.45	4.50	4.50	4.74	4.59	4.53	4.39
New Hampshire	2.06	6.42	6.73	6.51	4.66	5.08	4.98	2.89
New Jersey	NA	NA	NA	NA	2.97	2.46	2.58	2.50
New Mexico	NA	3.60	3.58	NA	3.22	0.56	2.69	2.77
New York	NA	NA	NA	NA	4.02	3.05	3.02	2.64
North Carolina	3.09	3.79	3.60	3.63	3.96	4.13	3.91	3.64
North Dakota	2.37	2.47	2.53	2.66	2.82	3.07	2.58	2.45
Ohio	5.17	4.90	5.13	5.42	4.39	4.65	3.69	4.66
Oklahoma	3.28	3.50	3.50	3.45	3.66	3.43	3.33	3.58
Oregon	3.89	0.81	4.37	3.87	3.75	4.23	3.48	3.94
Pennsylvania	4.19	4.41	4.45	4.59	4.15	4.16	3.99	3.83
Rhode Island	3.52	4.32	4.77	5.00	3.82	3.85	3.68	3.93
South Carolina	2.79	2.93	3.15	3.00	3.29	3.31	3.22	3.16
South Dakota	3.02	3.03	3.12	3.13	3.28	3.11	3.13	3.27
Tennessee	NA	3.37	3.54	3.57	3.94	3.26	4.07	3.44
Texas	2.14	1.98	2.04	2.12	2.35	2.27	2.16	2.12
Utah	2.99	3.31	3.16	2.85	3.00	3.20	3.15	2.94
Vermont	2.74	2.72	2.75	3.00	2.80	2.61	2.30	2.84
Virginia	3.13	3.76	3.88	5.07	4.07	5.16	4.34	3.75
Washington	NA	NA	NA	NA	2.64	2.51	2.44	2.35
West Virginia	NA	NA	2.82	2.68	3.39	3.35	3.30	3.62
Wisconsin	3.86	3.72	3.82	3.90	3.78	3.85	3.90	3.25
Wyoming	4.00	3.83	NA	3.74	3.37	3.38	3.37	3.29
Total	**2.79**	**2.77**	**2.97**	**3.07**	**3.14**	**2.92**	**2.95**	**2.75**

See footnotes at end of table.

Table 23

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	September	August	July	June	May	April	March	February
Alabama	3.05	3.16	3.22	3.19	3.20	3.49	2.95	3.58
Alaska	1.21	1.22	1.22	1.40	1.43	1.42	1.45	1.52
Arizona	3.09	3.08	3.23	3.37	3.31	3.32	3.20	3.61
Arkansas	3.05	3.10	3.49	3.29	3.38	3.59	3.80	3.64
California	3.38	3.33	3.56	3.53	3.01	4.11	3.45	5.58
Colorado	0.78	1.39	1.51	1.49	1.55	1.67	1.85	2.05
Connecticut	3.48	3.66	3.63	3.72	4.16	4.58	4.77	5.17
Delaware	4.33	5.05	4.26	4.29	4.26	4.56	3.94	4.17
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.53	3.67	4.04	3.89	4.07	4.31	4.14	4.01
Georgia	3.71	4.09	3.07	4.08	4.45	4.16	4.27	4.50
Hawaii	—	—	—	—	—	—	—	—
Idaho	2.94	3.32	2.97	3.10	3.09	3.10	3.25	3.02
Illinois	3.73	4.41	3.12	4.52	4.21	4.04	4.15	4.15
Indiana	3.86	5.45	4.98	3.69	4.45	4.85	4.20	4.23
Iowa	3.61	3.29	4.45	2.45	4.54	3.24	2.45	2.64
Kansas	2.45	2.82	2.94	3.20	3.48	3.73	3.74	3.78
Kentucky	3.89	3.94	3.83	3.72	3.49	4.20	3.93	4.67
Louisiana	2.04	2.19	2.54	2.68	2.89	2.46	2.50	2.50
Maine	3.96	3.84	4.21	4.14	4.75	6.19	6.08	6.69
Maryland	5.76	4.48	8.08	5.37	4.53	5.24	5.81	5.69
Massachusetts	4.13	4.26	4.72	4.76	4.54	5.89	6.54	6.85
Michigan	4.58	5.10	4.67	4.23	3.93	3.73	3.54	4.03
Minnesota	2.64	2.86	2.79	2.54	2.97	3.01	3.03	2.95
Mississippi	3.09	3.06	3.41	3.10	3.31	3.37	3.32	3.24
Missouri	4.13	4.07	3.93	4.30	4.27	4.10	4.20	4.61
Montana	9.73	6.61	5.96	5.63	5.15	4.56	4.39	4.24
Nebraska	2.59	2.75	3.27	3.37	3.37	3.38	3.37	3.30
Nevada	4.35	4.46	5.86	5.81	5.94	5.84	6.00	6.06
New Hampshire	3.79	3.63	3.67	3.47	4.00	4.10	5.87	6.26
New Jersey	2.47	2.50	3.14	3.18	3.40	3.32	3.33	3.34
New Mexico	3.17	3.33	3.22	3.72	3.79	4.19	5.84	10.72
New York	2.44	2.55	2.82	2.55	3.21	3.21	10.85	3.63
North Carolina	3.56	3.63	3.61	3.58	3.69	3.64	4.20	4.42
North Dakota	2.06	2.47	2.79	2.54	3.08	3.03	3.15	2.94
Ohio	4.64	6.02	4.73	4.19	4.18	4.20	4.57	4.08
Oklahoma	3.34	3.38	3.35	3.37	3.06	3.28	4.05	4.11
Oregon	3.55	3.72	3.78	3.80	3.72	3.70	3.70	3.71
Pennsylvania	3.91	3.74	3.83	3.97	3.95	4.28	4.44	4.44
Rhode Island	3.08	2.98	3.59	3.58	3.75	4.04	4.06	4.25
South Carolina	2.95	2.50	3.43	3.25	3.37	3.48	3.59	3.45
South Dakota	3.44	3.29	3.22	3.55	3.49	3.38	3.37	3.25
Tennessee	3.54	3.49	4.51	3.62	3.71	3.78	3.86	4.22
Texas	1.85	2.13	2.50	2.21	2.42	2.45	2.45	2.69
Utah	2.99	3.26	3.11	2.70	2.82	2.87	2.96	3.10
Vermont	2.74	2.77	2.78	2.78	2.87	2.86	2.94	3.01
Virginia	3.24	3.22	3.95	3.56	3.24	3.02	4.21	4.91
Washington	2.39	2.60	2.51	2.84	4.02	2.86	2.73	2.74
West Virginia	3.42	3.46	3.51	3.40	3.21	3.47	3.39	3.33
Wisconsin	2.98	3.44	3.65	3.33	3.57	4.08	4.03	4.34
Wyoming	3.32	3.36	3.35	3.32	3.50	3.38	3.40	3.42
Total	**2.65**	**2.75**	**3.04**	**2.97**	**3.14**	**3.28**	**3.40**	**3.58**

NA Not Available.
— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999				
				August	July	June	May	April
Alabama	2.64	2.56	2.59	2.28	3.26	2.73	2.70	2.52
Alaska	1.63	1.84	1.69	1.50	1.62	1.59	1.61	1.60
Arizona	2.54	2.49	2.84	2.84	2.56	2.62	2.67	2.22
Arkansas	2.54	2.31	2.47	2.96	2.58	2.49	2.52	2.22
California	2.66	2.84	2.97	3.00	2.71	2.57	2.72	2.42
Colorado	2.58	2.85	3.48	2.52	2.53	3.18	2.60	2.25
Connecticut	2.57	2.47	2.42	2.65	2.59	2.52	2.50	2.54
Delaware	2.78	2.90	3.04	3.06	2.72	2.71	2.53	2.46
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.31	2.35	2.37	2.43	2.13	2.36	2.37	2.31
Georgia	2.51	3.04	2.60	2.66	2.60	2.47	2.58	2.13
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.35	2.28	2.35	2.72	2.48	2.44	2.36	2.20
Indiana	2.86	2.87	3.03	2.86	2.82	2.79	3.19	3.14
Iowa	2.99	3.00	3.14	2.94	2.93	2.97	3.01	2.77
Kansas	2.31	2.18	2.18	2.60	2.31	2.35	2.35	2.08
Kentucky	3.13	3.28	3.14	3.26	2.88	3.15	5.12	3.77
Louisiana	2.46	2.46	2.63	2.92	2.55	2.52	2.58	2.25
Maine	—	—	—	—	—	—	—	—
Maryland	3.05	2.81	2.80	3.44	2.98	2.88	3.27	2.55
Massachusetts	2.63	2.90	2.91	2.99	2.73	2.75	2.58	2.26
Michigan	1.61	1.13	0.68	1.67	1.92	1.79	1.74	1.09
Minnesota	2.47	2.52	2.36	1.93	2.60	2.48	2.32	2.31
Mississippi	2.39	2.38	2.58	2.79	2.43	2.43	2.45	2.30
Missouri	2.60	2.25	2.51	2.91	2.54	2.48	2.41	2.31
Montana	4.27	5.00	3.42	6.14	4.20	4.40	10.99	5.69
Nebraska	2.68	2.48	2.30	3.24	2.59	2.63	2.72	2.46
Nevada	2.39	2.39	2.04	2.49	2.43	2.46	2.43	2.55
New Hampshire	2.74	—	2.69	3.02	2.43	2.44	—	—
New Jersey	3.03	2.76	2.88	3.37	2.97	2.88	2.85	2.94
New Mexico	2.21	2.28	2.52	2.68	2.30	2.31	2.22	2.05
New York	2.72	2.64	2.71	3.05	2.80	2.72	2.71	2.49
North Carolina	2.82	2.76	3.05	3.09	2.56	2.70	2.71	3.31
North Dakota	—	—	3.81	—	—	—	—	—
Ohio	2.99	3.31	3.48	2.98	3.31	2.99	2.42	2.06
Oklahoma	2.62	2.55	2.76	2.94	2.65	2.59	2.66	2.58
Oregon	1.84	1.37	1.51	1.66	1.78	1.99	1.91	1.79
Pennsylvania	3.00	3.12	2.74	3.12	3.40	2.29	3.18	2.55
Rhode Island	—	3.38	3.16	—	—	—	—	—
South Carolina	3.61	3.65	4.12	3.85	3.47	3.70	3.46	2.94
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.39	2.37	2.54	2.83	2.44	2.40	2.44	2.17
Utah	2.43	2.08	1.86	2.67	2.39	2.43	2.36	2.36
Vermont	3.22	2.93	3.02	3.31	—	2.94	3.03	2.56
Virginia	3.07	3.02	2.77	3.42	2.78	3.39	2.89	2.79
Washington	—	2.79	1.55	—	—	—	—	—
West Virginia	3.00	4.41	4.02	2.93	3.13	3.08	2.81	3.12
Wisconsin	2.85	2.75	2.96	2.99	2.90	2.80	2.92	2.63
Wyoming	4.11	8.67	13.55	4.59	3.14	2.60	6.59	13.06
Total	**2.45**	**2.44**	**2.59**	**2.80**	**2.52**	**2.47**	**2.48**	**2.25**

See footnotes at end of table.

Table 24

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1999			1998				
	March	February	January	Total	December	November	October	September
Alabama	2.25	2.07	2.22	2.58	2.68	2.47	2.62	2.46
Alaska	1.72	1.70	1.68	1.80	1.72	1.74	1.72	1.73
Arizona	2.13	2.29	2.32	2.42	2.38	2.77	2.11	2.33
Arkansas	1.88	1.94	2.04	2.29	2.35	—	2.25	2.15
California	2.75	2.55	2.70	2.79	2.96	2.86	2.56	2.50
Colorado	2.18	2.24	3.26	2.98	3.33	3.15	2.71	2.82
Connecticut	2.12	2.02	2.11	2.44	1.90	2.45	2.07	2.22
Delaware	2.46	2.98	3.34	2.89	3.34	3.24	2.66	2.41
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.01	2.86	2.08	2.27	1.39	2.30	2.30	2.18
Georgia	1.37	2.15	4.83	3.21	2.11	2.67	3.80	4.00
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	1.86	1.81	2.27	2.25	2.12	2.31	2.20	2.01
Indiana	2.71	2.78	2.99	2.88	3.36	2.86	3.23	2.74
Iowa	3.13	3.45	3.62	3.07	3.38	3.11	2.93	2.91
Kansas	1.80	1.96	2.24	2.14	2.21	2.25	2.03	1.87
Kentucky	3.33	2.99	2.51	3.40	2.90	3.11	2.85	2.42
Louisiana	2.01	2.08	2.13	2.37	2.16	2.32	2.25	2.12
Maine	—	—	—	—	—	—	—	—
Maryland	2.60	3.46	3.52	2.75	2.64	3.85	3.13	2.53
Massachusetts	2.10	2.13	2.43	2.78	2.26	2.44	2.28	2.13
Michigan	0.88	1.33	2.07	1.24	1.25	1.10	1.46	1.67
Minnesota	2.56	3.49	3.02	2.36	3.43	2.69	2.32	2.00
Mississippi	1.91	1.95	2.05	2.31	1.97	2.28	2.21	2.16
Missouri	2.16	2.29	2.34	2.26	2.31	2.32	2.14	2.13
Montana	7.37	5.20	2.04	2.06	1.48	1.37	1.30	1.02
Nebraska	1.37	2.79	2.28	2.40	2.92	2.81	2.10	1.93
Nevada	2.07	2.40	2.20	2.38	2.01	2.61	2.33	2.42
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.46	2.76	2.95	2.74	2.44	3.11	2.74	2.56
New Mexico	1.79	1.89	2.03	2.22	2.14	2.34	2.02	1.90
New York	2.37	2.55	2.80	2.57	2.43	2.80	2.30	2.21
North Carolina	3.32	3.33	3.34	2.81	3.93	3.59	3.00	2.53
North Dakota	—	—	—	—	—	—	—	—
Ohio	2.99	3.32	3.88	3.24	3.88	4.36	3.88	4.09
Oklahoma	2.28	2.48	2.32	2.48	2.28	2.50	2.41	2.16
Oregon	1.67	1.83	2.01	1.56	1.92	1.88	1.63	1.48
Pennsylvania	3.02	2.98	2.94	3.26	4.88	6.91	2.50	3.74
Rhode Island	—	—	—	3.38	—	—	—	—
South Carolina	3.02	2.86	3.00	3.62	4.05	3.71	3.21	3.37
South Dakota	—	—	—	1.77	—	—	—	1.77
Tennessee	—	—	—	—	—	—	—	—
Texas	1.99	2.09	2.10	2.30	2.24	2.25	2.16	2.05
Utah	2.56	2.19	2.24	2.11	2.45	2.42	2.20	1.95
Vermont	2.44	2.47	2.55	2.90	2.87	2.84	2.86	2.54
Virginia	3.09	3.12	3.18	3.10	4.03	3.72	3.09	2.76
Washington	—	—	—	3.44	—	—	—	—
West Virginia	2.96	2.93	3.19	3.29	3.02	3.25	1.20	2.94
Wisconsin	2.51	2.79	2.64	2.67	2.73	2.63	2.42	2.31
Wyoming	6.02	4.83	6.92	8.31	11.18	14.27	5.33	6.64
Total	**2.11**	**2.27**	**2.25**	**2.40**	**2.22**	**2.37**	**2.22**	**2.15**

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	August	July	June	May	April	March	February	January
Alabama	2.50	2.63	2.49	2.62	2.69	2.55	2.44	2.86
Alaska	1.76	1.80	1.87	1.84	1.84	1.85	1.88	1.85
Arizona	2.28	2.41	2.79	3.20	2.82	3.07	2.56	2.84
Arkansas	2.05	2.49	2.33	2.33	2.56	2.36	2.16	2.25
California	2.83	2.92	2.70	2.94	2.71	2.85	2.79	2.94
Colorado	3.31	2.77	2.83	2.56	2.53	2.61	2.65	3.01
Connecticut	2.34	2.46	2.38	2.56	2.70	2.79	2.63	2.74
Delaware	2.66	3.47	3.27	1.34	1.41	4.15	3.21	5.34
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.18	2.27	2.31	2.31	2.68	2.64	2.49	2.25
Georgia	2.82	3.18	2.91	3.72	1.94	1.72	2.88	2.35
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	1.95	2.27	2.37	2.37	2.55	2.34	2.28	2.25
Indiana	2.58	2.80	2.95	2.98	3.37	3.25	2.64	3.84
Iowa	2.80	3.01	2.86	3.16	3.14	3.35	3.00	3.36
Kansas	1.99	2.28	2.14	2.20	2.40	2.36	1.97	3.35
Kentucky	2.43	2.86	3.68	3.59	5.25	4.04	3.58	3.46
Louisiana	2.17	2.59	2.40	2.52	2.66	2.51	2.47	2.61
Maine	—	—	—	—	—	—	—	—
Maryland	2.49	2.84	2.93	2.96	3.33	3.18	3.32	3.75
Massachusetts	2.35	2.62	2.24	2.86	3.66	3.64	2.95	3.16
Michigan	1.38	1.34	1.29	1.20	1.35	0.75	0.84	0.51
Minnesota	2.41	2.48	2.42	2.74	2.76	2.83	2.62	2.63
Mississippi	2.16	2.47	2.36	2.41	2.56	2.46	2.46	2.48
Missouri	1.95	2.39	2.41	2.31	2.56	2.52	2.82	2.63
Montana	4.99	2.47	2.59	5.34	1.40	12.33	8.49	4.61
Nebraska	2.49	2.62	2.37	2.40	1.98	2.72	4.47	2.72
Nevada	2.42	2.34	2.73	2.44	2.31	2.02	2.37	2.41
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.46	2.92	2.73	2.77	3.05	2.88	2.83	2.98
New Mexico	2.03	2.32	2.20	2.33	2.41	2.39	2.30	2.43
New York	2.29	2.63	2.51	2.64	2.87	2.96	2.95	3.00
North Carolina	2.55	2.92	2.78	2.89	3.37	4.03	—	3.02
North Dakota	—	—	—	—	—	—	—	—
Ohio	3.93	2.98	2.79	3.06	4.01	4.14	3.16	3.32
Oklahoma	2.07	2.52	2.41	2.52	2.88	2.62	2.72	4.47
Oregon	1.56	1.46	1.31	1.50	1.36	1.23	1.03	1.14
Pennsylvania	2.63	3.18	2.32	5.37	5.94	2.69	2.64	2.79
Rhode Island	3.40	3.38	3.40	3.43	3.45	3.19	3.24	3.48
South Carolina	3.53	3.58	3.92	3.41	3.44	3.58	3.53	4.05
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.11	2.46	2.34	2.38	2.52	2.43	2.41	2.49
Utah	2.04	2.15	1.94	—	—	—	—	—
Vermont	2.67	3.09	2.81	3.03	3.08	2.81	2.77	3.02
Virginia	2.60	3.02	2.93	2.99	4.46	3.34	3.78	3.05
Washington	—	—	—	—	5.59	3.86	4.11	1.64
West Virginia	3.85	6.31	2.62	3.58	—	—	—	5.59
Wisconsin	2.49	2.80	2.64	2.95	3.13	2.75	2.91	2.90
Wyoming	67.70	8.23	7.66	11.70	4.77	10.42	8.72	5.39
Total	**2.21**	**2.50**	**2.40**	**2.47**	**2.59**	**2.53**	**2.51**	**2.64**

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

— Not Applicable.

Notes: Data for 1998 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999

State	YTD 1999		YTD 1998		YTD 1997		1999	
							September	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	68.3	15.4	82.3	23.7	62.8	24.6	48.8	14.4
Alaska	54.9	99.7	49.6	99.2	55.2	97.8	56.7	100.0
Arizona	83.2	35.4	85.7	32.8	84.7	25.1	78.6	40.8
Arkansas	NA	NA	92.1	8.9	94.5	10.5	NA	8.9
California	49.6	9.7	51.2	9.4	50.8	8.9	49.9	10.6
Colorado	NA	NA	94.7	13.2	93.4	23.6	NA	NA
Connecticut	65.1	57.6	69.5	55.6	85.3	66.4	74.5	59.3
Delaware	100.0	17.5	100.0	22.6	100.0	31.0	100.0	10.1
District of Columbia	NA	—	52.6	—	54.9	—	32.4	—
Florida	92.3	3.3	96.8	7.4	97.8	10.0	94.7	2.4
Georgia	NA	NA	85.4	26.8	89.1	26.7	NA	NA
Hawaii	100.0	100.0	100.0	—	100.0	—	100.0	100.0
Idaho	87.0	2.8	87.5	2.5	86.9	2.0	80.4	2.1
Illinois	42.2	8.2	48.8	8.9	55.3	11.5	34.5	7.2
Indiana	NA	NA	80.0	9.5	87.9	16.0	NA	NA
Iowa	83.4	7.3	85.9	6.2	89.2	8.6	71.6	7.2
Kansas	NA	NA	71.8	11.1	70.2	9.2	64.4	14.7
Kentucky	85.9	16.3	87.6	16.9	89.7	19.2	82.6	15.7
Louisiana	96.4	7.3	95.0	7.8	96.0	10.1	96.1	8.3
Maine	100.0	86.4	100.0	87.9	100.0	91.4	100.0	87.1
Maryland	NA	NA	37.1	6.1	71.2	7.4	20.5	4.2
Massachusetts	NA	NA	56.7	13.3	63.0	20.2	NA	NA
Michigan	58.2	8.8	59.9	8.4	63.9	9.0	40.1	4.9
Minnesota	95.8	36.9	98.1	39.9	98.9	40.4	96.3	37.4
Mississippi	NA	NA	94.6	37.3	95.1	39.6	94.0	34.5
Missouri	77.8	18.2	79.1	18.6	80.1	21.8	64.7	12.7
Montana	80.1	1.5	78.2	1.5	91.8	3.1	75.3	0.8
Nebraska	63.9	19.5	76.6	11.9	75.7	27.0	60.2	12.3
Nevada	58.2	8.2	71.5	3.1	71.8	1.8	50.2	16.8
New Hampshire	NA	24.9	93.9	33.7	93.1	48.8	89.6	27.5
New Jersey	NA	NA	61.3	46.0	58.7	47.0	NA	NA
New Mexico	48.0	NA	64.6	10.4	69.4	9.5	39.7	9.5
New York	NA	NA	52.8	5.5	64.5	8.5	NA	29.0
North Carolina	78.8	48.7	91.4	32.4	93.2	45.5	99.2	63.7
North Dakota	86.9	13.7	83.1	13.2	89.8	18.5	82.6	12.0
Ohio	NA	NA	56.3	4.3	65.7	5.7	31.6	1.0
Oklahoma	73.6	4.3	74.7	3.7	83.2	4.7	58.5	3.8
Oregon	98.8	14.9	99.1	14.5	98.6	16.3	98.3	12.2
Pennsylvania	56.7	11.3	56.7	13.2	64.7	14.2	49.2	9.3
Rhode Island	54.6	6.8	62.0	7.3	83.6	17.4	39.9	24.7
South Carolina	91.6	82.9	98.2	86.7	98.7	86.9	99.9	88.1
South Dakota	81.3	37.8	83.4	32.5	83.8	24.1	71.5	26.2
Tennessee	NA	NA	87.8	34.5	91.8	38.3	70.8	34.8
Texas	76.4	NA	80.9	14.2	60.6	17.3	72.8	17.1
Utah	82.2	9.9	82.1	8.2	82.8	8.9	75.4	9.8
Vermont	100.0	75.1	100.0	100.0	100.0	100.0	100.0	69.8
Virginia	NA	NA	72.1	12.5	78.2	13.0	59.3	NA
Washington	NA	NA	86.8	18.5	89.3	23.5	NA	NA
West Virginia	NA	NA	49.4	6.2	55.2	12.2	35.1	12.8
Wisconsin	71.9	20.3	72.9	21.7	82.3	27.1	60.9	16.2
Wyoming	90.2	NA	89.5	2.0	81.8	2.5	85.9	NA
Total	**64.6**	**17.0**	**67.7**	**15.3**	**71.1**	**17.7**	**58.1**	**17.0**

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999							
	August		July		June		May	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	47.0	14.2	50.9	14.7	53.4	15.3	67.4	15.0
Alaska	55.9	99.9	56.3	98.4	57.4	100.0	58.9	99.9
Arizona	78.7	34.1	83.0	43.0	82.1	37.2	82.5	42.3
Arkansas	86.7	8.2	83.6	7.9	NA	NA	NA	8.6
California	37.8	7.5	40.1	8.8	48.6	10.1	41.9	12.7
Colorado	NA	NA	NA	NA	95.8	0.6	96.7	0.6
Connecticut	51.6	54.7	55.4	54.7	56.8	62.3	53.6	55.2
Delaware	100.0	12.7	100.0	12.3	100.0	16.4	100.0	22.4
District of Columbia	31.7	—	NA	—	33.9	—	39.4	—
Florida	93.9	2.8	94.7	2.7	96.3	3.2	91.6	4.2
Georgia	NA	NA	55.3	11.0	60.0	10.9	NA	NA
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	82.0	3.4	83.7	2.8	83.3	2.8	85.5	2.3
Illinois	24.5	5.1	26.3	5.3	33.7	6.7	34.9	6.6
Indiana	NA	NA	NA	NA	NA	NA	NA	NA
Iowa	75.0	7.1	72.2	7.1	76.4	5.9	93.5	5.9
Kansas	53.7	15.2	52.3	12.4	55.9	6.6	68.4	NA
Kentucky	66.3	16.9	79.7	16.1	80.4	12.9	84.4	16.5
Louisiana	96.4	7.9	96.1	7.3	97.1	6.7	96.6	6.4
Maine	100.0	85.7	100.0	84.1	100.0	87.9	100.0	84.4
Maryland	19.6	4.0	NA	3.9	19.8	4.9	NA	NA
Massachusetts	NA	NA	NA	NA	44.2	NA	54.1	41.5
Michigan	32.0	4.4	37.5	4.5	39.5	4.9	47.1	7.2
Minnesota	89.4	34.3	96.7	36.7	92.1	47.2	96.6	29.3
Mississippi	93.8	33.0	94.1	33.4	94.4	35.2	NA	38.1
Missouri	65.5	11.7	47.4	11.0	71.0	13.6	75.8	14.0
Montana	68.5	0.5	70.1	1.0	67.9	0.4	92.8	1.7
Nebraska	86.4	12.5	68.6	9.0	63.2	18.1	59.4	22.4
Nevada	35.0	17.1	33.0	18.1	55.6	18.7	60.2	18.7
New Hampshire	80.6	26.3	86.6	26.3	89.1	23.2	NA	26.2
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	42.8	9.8	27.3	5.7	28.9	5.9	27.2	4.9
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	87.0	48.9	87.4	56.1	88.0	49.9	89.9	50.0
North Dakota	77.9	20.2	79.6	10.9	77.0	16.4	85.3	6.0
Ohio	NA	NA	30.8	0.6	30.1	1.1	34.5	1.8
Oklahoma	60.6	3.5	57.6	3.4	24.2	4.0	68.1	3.8
Oregon	98.5	2.7	98.8	12.2	98.5	14.1	98.7	14.1
Pennsylvania	45.2	9.4	53.6	10.7	50.3	11.0	59.1	11.8
Rhode Island	16.4	36.2	44.1	28.7	46.8	32.0	48.9	31.4
South Carolina	94.6	81.7	94.7	87.0	94.9	81.2	95.4	86.1
South Dakota	69.8	20.3	73.9	20.7	60.2	33.2	78.7	38.8
Tennessee	76.1	26.7	74.1	28.3	58.7	27.0	77.6	26.4
Texas	74.4	33.3	72.5	25.4	72.4	21.4	74.4	NA
Utah	74.4	9.2	76.0	8.7	72.9	14.8	80.1	8.7
Vermont	100.0	66.5	100.0	68.6	100.0	68.7	100.0	68.8
Virginia	57.7	4.4	62.5	7.9	56.6	5.3	NA	NA
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	33.9	30.2	NA	NA	47.0	11.8
Wisconsin	53.5	15.8	47.7	18.8	51.4	19.9	62.8	18.3
Wyoming	73.9	NA	84.3	NA	83.8	3.2	87.5	3.5
Total	**53.6**	**18.9**	**54.9**	**18.7**	**57.1**	**18.0**	**59.9**	**17.0**

See footnotes at end of table.

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999							
	April		March		February		January	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	76.0	15.2	76.3	15.9	77.4	16.1	81.0	18.4
Alaska	53.5	99.9	57.5	99.9	53.8	99.9	59.8	99.9
Arizona	82.5	30.5	84.6	26.3	84.6	34.0	86.3	32.3
Arkansas	89.6	8.7	90.1	9.6	91.4	10.6	93.3	11.7
California	51.1	12.7	59.5	13.4	52.6	14.4	55.7	11.8
Colorado	NA	0.8	96.7	0.4	93.2	0.3	97.1	0.1
Connecticut	72.9	64.0	67.4	58.6	69.7	67.0	69.6	60.4
Delaware	100.0	17.6	100.0	22.7	100.0	24.0	100.0	18.1
District of Columbia	43.5	—	53.8	—	52.4	—	58.2	—
Florida	92.0	3.4	90.2	4.2	90.9	4.0	91.5	3.6
Georgia	82.0	6.0	83.0	13.5	81.6	11.3	85.4	10.1
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	87.0	2.6	87.8	2.8	88.8	3.1	89.4	3.6
Illinois	40.9	10.3	47.7	9.1	46.1	10.0	46.9	10.9
Indiana	NA	NA	NA	NA	79.3	9.2	79.9	NA
Iowa	77.2	6.2	87.3	7.5	84.7	8.0	86.7	9.2
Kansas	69.1	4.9	NA	5.0	NA	5.4	NA	NA
Kentucky	83.9	16.3	88.8	16.6	89.2	18.0	90.3	16.9
Louisiana	97.2	7.0	96.2	7.5	95.9	7.8	96.2	7.5
Maine	100.0	75.1	100.0	80.7	100.0	97.3	100.0	93.8
Maryland	25.1	1.6	NA	9.5	NA	6.5	39.3	7.5
Massachusetts	46.8	NA	67.0	NA	NA	32.3	78.5	28.3
Michigan	58.0	14.2	63.3	16.2	64.5	17.3	67.3	16.2
Minnesota	91.7	37.1	96.5	39.3	96.5	33.8	96.6	37.9
Mississippi	NA	NA	88.4	35.1	96.9	38.2	NA	NA
Missouri	81.4	17.2	83.3	24.6	79.1	33.9	85.5	26.3
Montana	77.3	1.7	78.1	1.8	80.1	1.7	83.5	2.4
Nebraska	65.0	64.6	67.6	23.8	63.5	28.7	59.8	23.5
Nevada	63.2	25.4	67.7	28.0	69.2	30.9	72.6	31.4
New Hampshire	94.2	27.2	94.5	19.6	95.3	24.1	95.5	24.2
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	40.8	NA	58.1	4.2	52.8	3.6	66.7	NA
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	90.7	42.0	55.1	44.4	73.8	43.2	97.0	41.1
North Dakota	86.8	14.5	89.7	13.7	83.6	13.6	92.4	18.4
Ohio	38.7	2.0	48.5	3.6	47.1	3.6	57.0	4.1
Oklahoma	75.7	4.3	79.2	5.0	78.9	5.1	83.2	5.7
Oregon	98.7	15.1	98.7	47.4	99.0	15.8	99.1	16.9
Pennsylvania	56.1	11.1	61.4	12.5	56.4	11.1	66.5	14.6
Rhode Island	56.2	38.8	60.4	50.1	61.5	30.8	59.4	24.4
South Carolina	85.3	72.8	78.0	83.3	97.8	83.0	97.6	84.8
South Dakota	83.2	41.8	84.3	47.4	84.1	50.0	86.6	51.8
Tennessee	NA	NA	83.9	22.5	84.8	23.3	89.7	25.4
Texas	75.7	20.5	78.2	16.3	81.3	13.0	71.0	13.8
Utah	83.0	8.0	82.8	8.3	85.7	10.8	85.8	12.2
Vermont	100.0	76.3	100.0	82.2	100.0	81.5	100.0	81.4
Virginia	55.7	7.4	65.8	15.2	68.2	13.6	76.4	20.7
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	51.4	NA	54.2	NA	54.8	10.1	49.9	5.5
Wisconsin	70.9	21.3	76.6	21.9	78.8	22.7	80.6	25.4
Wyoming	88.6	2.4	88.1	2.9	97.3	4.2	96.5	4.3
Total	**63.3**	**15.8**	**67.9**	**16.7**	**68.2**	**15.5**	**72.2**	**15.4**

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	Total		December		November		October	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	80.5	23.3	75.4	20.5	73.6	23.3	71.5	21.7
Alaska	49.6	99.4	48.8	100.0	51.1	100.0	48.7	100.0
Arizona	85.0	33.5	84.0	33.6	82.9	35.3	79.9	36.7
Arkansas	90.8	9.5	89.0	9.0	86.1	10.2	81.5	10.4
California	48.9	10.4	49.2	11.1	38.8	10.5	37.5	11.1
Colorado	94.3	7.6	95.2	3.3	94.0	4.7	87.5	6.6
Connecticut	68.7	55.8	62.6	61.5	76.1	56.0	61.3	51.9
Delaware	100.0	22.4	100.0	24.8	100.0	23.2	100.0	18.2
District of Columbia	52.3	—	59.7	—	50.2	—	37.8	—
Florida	96.6	7.3	96.0	6.4	95.6	5.8	96.0	5.6
Georgia	83.6	25.3	79.2	22.2	77.4	19.2	74.6	19.6
Hawaii	100.0	100.0	100.0	100.0	100.0	—	100.0	—
Idaho	86.4	2.6	86.1	3.6	83.9	2.2	75.3	2.6
Illinois	47.4	9.3	45.2	12.3	44.8	10.0	40.7	9.0
Indiana	79.2	9.3	82.6	8.6	74.5	8.9	69.0	8.1
Iowa	85.8	6.8	89.4	10.0	84.0	9.7	77.4	6.8
Kansas	69.5	9.9	61.0	5.7	62.1	5.7	60.3	7.2
Kentucky	87.5	17.8	88.6	23.6	87.1	20.9	82.3	15.9
Louisiana	94.6	9.3	92.2	20.6	94.3	9.6	93.9	8.8
Maine	100.0	87.4	100.0	84.4	100.0	87.3	100.0	87.0
Maryland	36.7	7.0	37.7	10.3	38.3	9.5	25.2	8.6
Massachusetts	57.9	26.3	82.1	25.7	57.8	28.5	45.1	27.8
Michigan	59.7	10.8	64.7	12.0	57.9	10.9	47.8	6.5
Minnesota	97.6	39.7	96.8	39.9	95.9	40.4	97.9	37.1
Mississippi	94.8	37.6	96.3	38.6	95.5	38.6	95.3	37.4
Missouri	78.3	18.2	79.2	21.9	74.5	18.3	66.6	12.8
Montana	77.1	1.5	77.0	1.5	74.9	1.4	70.5	1.0
Nebraska	72.5	12.7	51.5	20.6	66.5	14.1	80.4	13.0
Nevada	70.3	15.5	69.9	33.2	63.6	27.5	62.6	25.5
New Hampshire	94.1	30.7	95.3	24.4	95.5	21.9	93.1	21.5
New Jersey	60.5	49.5	59.7	59.4	60.2	55.3	53.3	52.7
New Mexico	67.0	9.8	79.0	4.6	70.4	11.0	58.3	8.9
New York	53.2	8.3	56.7	12.0	53.3	7.7	50.2	10.7
North Carolina	90.6	32.1	90.2	32.7	87.5	34.1	83.2	27.1
North Dakota	83.8	14.6	87.2	18.5	86.2	18.8	80.7	20.5
Ohio	55.1	4.3	50.3	5.2	50.7	4.3	56.3	2.6
Oklahoma	73.2	3.6	71.3	4.9	65.7	3.7	60.5	1.9
Oregon	99.0	14.3	99.1	14.4	99.0	15.1	98.4	11.8
Pennsylvania	56.9	13.1	59.0	13.2	57.1	13.1	53.1	11.3
Rhode Island	59.3	7.4	52.5	7.6	52.2	8.8	48.1	6.6
South Carolina	97.9	86.7	97.1	86.5	96.9	86.5	96.9	87.4
South Dakota	84.2	35.6	84.6	46.5	84.5	45.3	95.8	40.1
Tennessee	87.3	33.1	89.5	33.6	86.9	32.9	76.2	21.4
Texas	81.0	14.1	83.4	12.7	84.4	13.4	71.8	14.9
Utah	82.5	8.6	85.2	9.7	82.2	10.5	80.1	9.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	72.1	12.8	75.8	15.9	72.1	16.9	63.5	9.5
Washington	86.8	20.1	88.3	25.4	85.0	21.4	85.8	31.6
West Virginia	49.5	6.3	55.3	7.4	50.0	6.6	38.6	5.9
Wisconsin	74.0	22.0	79.2	23.8	74.9	24.4	71.1	19.0
Wyoming	90.5	2.0	97.9	2.1	87.7	2.0	83.8	2.2
Total	**67.0**	**16.1**	**68.3**	**17.2**	**64.5**	**15.7**	**59.2**	**14.8**

See footnotes at end of table.

Table 25

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	September		August		July		June	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	76.3	21.5	78.7	20.1	78.6	22.4	80.9	23.0
Alaska	47.3	100.0	48.7	96.4	47.2	96.5	45.4	100.0
Arizona	83.7	33.3	83.0	32.7	84.4	32.9	86.4	33.8
Arkansas	82.4	9.6	84.9	8.0	86.1	7.2	86.8	8.3
California	33.2	8.7	29.0	8.0	36.4	9.2	58.4	10.8
Colorado	93.2	5.6	91.1	8.9	92.0	9.4	91.6	9.9
Connecticut	55.2	57.5	58.0	49.3	62.3	54.9	61.0	50.7
Delaware	100.0	17.9	100.0	11.5	100.0	18.1	100.0	19.7
District of Columbia	36.8	—	35.7	—	40.7	—	42.2	—
Florida	96.4	6.5	96.4	10.2	96.1	7.2	96.6	7.4
Georgia	73.6	28.4	71.5	15.0	71.5	11.5	80.9	29.3
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	80.6	2.5	83.3	3.5	84.2	2.7	85.6	1.8
Illinois	37.3	7.7	36.5	6.6	27.8	5.4	43.2	5.7
Indiana	57.3	6.8	70.2	5.5	59.1	6.8	69.8	6.2
Iowa	77.0	5.7	82.1	5.7	72.4	5.2	73.6	4.8
Kansas	57.9	14.1	61.8	14.2	60.8	16.7	56.3	13.6
Kentucky	81.9	14.7	79.1	14.1	76.5	18.5	82.2	16.8
Louisiana	94.4	9.1	94.5	7.7	94.2	7.1	95.4	7.3
Maine	100.0	87.3	100.0	85.9	100.0	84.3	100.0	88.1
Maryland	23.0	3.9	22.7	7.2	22.2	2.8	24.3	5.2
Massachusetts	80.7	19.3	49.6	19.8	46.4	18.4	42.2	18.8
Michigan	42.5	6.3	37.5	4.8	39.6	5.6	42.3	6.1
Minnesota	99.3	36.7	99.0	35.3	98.8	36.6	99.2	43.0
Mississippi	94.8	34.0	97.1	37.3	95.2	35.2	95.9	38.1
Missouri	70.1	13.1	44.5	12.6	66.2	14.6	67.3	13.0
Montana	64.2	0.6	68.6	0.8	67.7	0.4	66.7	0.5
Nebraska	74.5	10.2	82.0	7.6	66.3	4.2	67.1	9.9
Nevada	55.5	19.1	55.2	17.7	65.2	3.6	70.0	4.2
New Hampshire	91.9	21.5	82.4	25.8	89.0	34.9	90.9	32.7
New Jersey	54.8	52.5	57.9	51.0	55.7	41.9	59.2	43.4
New Mexico	52.1	13.2	52.4	15.5	53.2	18.7	46.7	14.1
New York	43.3	6.9	43.2	8.2	43.2	6.3	49.8	6.2
North Carolina	84.9	23.4	86.2	27.3	85.8	33.3	85.1	30.9
North Dakota	68.1	13.1	67.2	8.5	80.4	11.1	81.7	10.5
Ohio	44.9	2.2	36.3	1.4	48.0	2.0	45.6	2.2
Oklahoma	59.7	1.9	59.5	1.9	61.8	2.1	61.9	2.3
Oregon	98.7	11.6	98.6	11.8	98.9	12.4	99.0	14.7
Pennsylvania	54.2	11.8	46.3	11.7	50.1	12.2	52.7	12.5
Rhode Island	48.1	6.3	100.0	6.5	47.3	5.7	52.2	6.3
South Carolina	97.2	88.2	97.2	88.0	97.7	87.4	97.8	88.1
South Dakota	73.7	22.1	74.9	18.3	75.5	22.7	73.0	25.2
Tennessee	75.5	32.2	72.6	32.3	73.0	32.4	75.9	35.6
Texas	78.9	14.9	76.7	14.1	72.4	12.4	84.3	15.2
Utah	77.6	8.9	71.6	8.4	70.6	7.3	75.6	8.8
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	59.0	7.6	50.7	13.0	70.0	8.7	68.0	9.4
Washington	86.0	17.2	84.0	15.1	82.1	16.3	80.4	23.1
West Virginia	36.2	6.8	31.7	6.4	30.4	5.7	32.4	5.7
Wisconsin	45.5	18.0	48.5	14.7	47.6	14.7	55.5	17.3
Wyoming	84.9	2.4	92.6	2.6	84.9	2.3	86.2	2.3
Total	**57.0**	**14.2**	**53.3**	**13.8**	**56.0**	**13.1**	**62.9**	**15.1**

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	May		April		March		February	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	81.7	22.4	83.0	23.8	83.5	27.0	85.2	26.3
Alaska	47.8	100.0	49.5	100.0	49.9	100.0	52.7	100.0
Arizona	83.6	35.9	85.2	32.8	86.9	34.1	87.4	27.8
Arkansas	88.8	9.9	93.0	9.3	94.0	10.4	95.4	11.1
California	53.9	11.3	58.3	10.5	75.5	16.0	59.8	8.4
Colorado	95.0	10.1	95.8	8.4	96.1	8.9	95.1	7.9
Connecticut	76.2	53.5	62.2	59.8	71.1	57.3	78.1	55.6
Delaware	100.0	19.9	100.0	23.8	100.0	29.2	100.0	29.8
District of Columbia	48.0	—	52.8	—	60.4	—	59.3	—
Florida	96.9	5.9	97.5	7.8	96.8	8.2	97.1	7.7
Georgia	83.7	29.9	86.3	28.7	88.8	32.7	91.3	31.6
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	85.7	2.2	86.7	2.2	88.3	2.0	88.9	3.0
Illinois	35.7	7.4	45.0	9.9	57.8	11.3	51.3	10.7
Indiana	75.8	7.6	78.9	10.8	88.3	13.7	83.9	13.2
Iowa	88.9	4.5	84.4	5.6	87.3	6.8	89.6	7.0
Kansas	70.9	10.4	71.3	7.3	78.4	7.2	75.2	7.0
Kentucky	84.8	17.6	86.2	17.5	90.4	16.4	90.1	21.3
Louisiana	95.8	7.9	98.0	7.9	94.6	8.0	94.4	7.3
Maine	100.0	84.3	100.0	84.0	100.0	85.7	100.0	91.6
Maryland	26.8	8.1	32.1	2.6	45.6	8.5	49.3	11.8
Massachusetts	48.9	31.1	56.2	29.2	61.0	30.2	58.7	30.5
Michigan	44.3	7.5	60.1	12.1	65.7	15.0	66.5	15.7
Minnesota	99.5	36.3	99.1	39.6	98.3	48.9	96.7	37.5
Mississippi	94.6	37.4	94.1	37.0	90.3	38.1	95.3	40.8
Missouri	76.4	14.5	82.3	17.9	83.5	22.3	85.6	24.7
Montana	72.1	0.8	76.4	1.4	80.5	2.2	80.5	2.8
Nebraska	74.6	10.9	72.1	16.0	77.9	18.2	78.6	17.6
Nevada	71.0	4.4	72.9	5.3	75.1	6.5	79.1	14.1
New Hampshire	94.2	38.9	95.5	44.6	93.0	36.1	95.6	38.0
New Jersey	51.7	42.6	60.1	46.6	66.9	46.5	64.1	50.5
New Mexico	54.6	11.1	62.1	7.2	70.6	1.6	68.0	1.8
New York	48.2	5.4	53.6	8.9	59.0	8.2	60.7	9.2
North Carolina	88.8	33.9	92.1	38.7	92.5	33.5	94.2	34.4
North Dakota	78.8	6.4	79.6	13.2	86.7	18.2	84.6	18.4
Ohio	42.3	2.6	54.9	4.6	61.1	5.4	61.2	7.9
Oklahoma	69.6	3.0	75.4	5.1	76.4	5.4	82.2	5.6
Oregon	98.8	15.7	98.9	14.1	99.1	16.9	99.2	14.9
Pennsylvania	53.1	12.9	58.5	13.0	60.2	13.3	57.3	15.1
Rhode Island	57.4	6.5	58.1	7.5	63.6	11.7	70.6	7.7
South Carolina	98.4	87.6	98.6	85.9	98.4	84.7	98.6	85.2
South Dakota	66.0	17.1	93.7	60.2	85.7	42.8	85.7	46.2
Tennessee	82.4	32.6	81.6	38.9	95.9	36.8	93.8	36.6
Texas	77.6	14.2	80.4	14.6	81.3	15.0	87.5	15.3
Utah	73.6	8.6	82.5	7.7	81.2	8.3	89.1	8.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.9	12.5	71.5	10.2	74.4	19.1	77.9	15.1
Washington	80.7	9.3	84.1	16.3	88.7	18.7	87.0	20.7
West Virginia	36.3	5.9	55.2	6.2	55.0	6.3	59.1	6.6
Wisconsin	55.6	17.0	75.5	21.5	79.8	26.0	81.6	26.1
Wyoming	90.8	1.6	92.8	2.3	89.0	1.9	90.1	1.7
Total	**62.6**	**14.9**	**67.7**	**15.8**	**73.6**	**17.3**	**72.9**	**16.7**

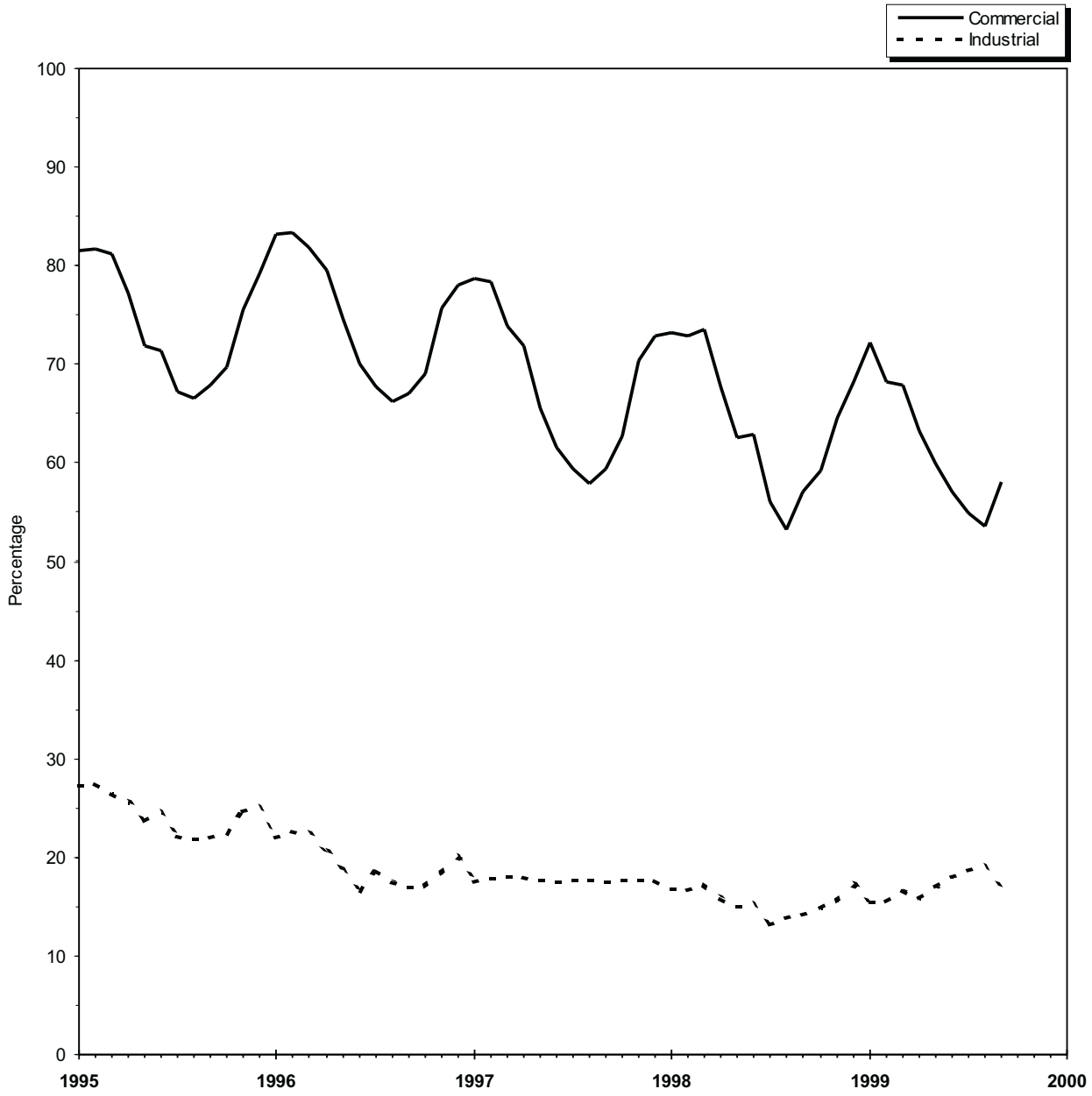
NA Not Available.
— Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1995-1999



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 26. Gas Home Customer-Weighted Heating Degree Days

Census Divisions	Cumulative November 1 through November 30				
	Normal[a]	1998	1999	Percent Change	
				Normal to 1999	1998 to 1999
New England					
CT, ME, MA, NH, RI, VT	693	711	608	-12.3	-14.5
Middle Atlantic					
NJ, NY, PA	646	618	536	-17.0	-13.3
East North Central					
IL, IN, MI, OH, WI	730	642	592	-18.9	-7.8
West North Central					
IA, KS, MN, MO, ND, NE, SD	788	673	564	-28.4	-16.2
South Atlantic					
DE, FL, GA, MD and DC, NC, SC, VA, WV	421	391	358	-15.0	-8.4
East South Central					
AL, KY, MS, TN	431	362	350	-18.8	-3.3
West South Central					
AR, LA, OK, TX	280	214	197	-29.6	-7.9
Mountain					
AZ, CO, ID, MT, NV, NM, UT, WY	715	651	546	-23.6	-16.1
Pacific[b]					
CA, OR, WA	341	382	309	-9.4	-19.1
U.S. Average[b]	559	514	452	-19.1	-12.1

[a] Normal is based on calculations of data from 1961 through 1990.

[b] Excludes Alaska and Hawaii.

Note: See Appendix A, Explanatory Note 10 for discussion of Heating Degree-Days computations.

Sources: National Oceanic and Atmospheric Administration.

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated form Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported of Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables l, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed productioncarbon dioxide, helium, hydrogen sulfide, and nitrogenare reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. De-

partment of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation off sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.

- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the Natural Gas Annual.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual.*

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or

"dome" formations), depleted fields (depleted reservoirs in oil and / or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

Preliminary values for the monthly U.S. Natural gas wellhead price are estimated from the prevailing cash market prices at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. These prices appear initially in the trade publication, *Natural Gas Week* , and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing, gathering, and transportation fees to the hubs. The estimated wellhead prices are derived with a statistical procedure based on analysis of monthly time series data for the period 1995 through 1997. The preliminary estimates are replaced when annual survey data become available. This procedure was adopted beginning with publication of the February 1999 issue of the *Natura*l *Gas Monthly* and it affects price estimates from January 1998 to the present.

Final Monthly Data

The Form EIA-895 requests State agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual.* For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual.*

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply / disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information published in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and five monthly surveys.

The annual report is the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines.

The monthly reports include two surveys of the natural gas industry, two surveys of the electric utility industry, and a voluntary survey completed by energy or conservation agencies in the gas producing States. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 is filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas. form was approved for use beginning with report year 1990.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and / or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1999 for report year 1998 totaled 1,910 questionnaire packages. To this original mailing, 5 names were added and 32 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,883 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents follow-up, 1,883 responses were entered into the data base, and there were 50 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multi-line schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual.*

Form-627 and Form EIA-895

Survey Design

Beginning with 1980 data, natural gas production data previously obtained on an informal basis from the appropriate State agencies were collected on the Form EIA-627, "Annual Quantity and Value of Natural Gas Report." This form was designed by the EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. It was also designed to avoid duplication of the efforts involved in the collection of production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

In 1993, the Office of Management and Budget approved the Form EIA-627 for use in report years 1994 through 1996. In 1994, the IOGCC decided to discontinue collection of their form. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." All gas producing States are requested to report on the Form EIA-895; a voluntary report. In 1996, an annual schedule was added to the voluntary Form EIA-895 to replace the Form EIA-627. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. Allproducing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts. EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Of the 33 natural gas producing states, 31 participated in the voluntary EIA-895 survey by filing the completed form or by responding to telephone contacts. Data for the 2 nonresponding States (Illinois and West Virginia) were estimated. Data on the quantities of nonhydrocarbon gases removed in 1998 were reported by the appropriate agencies of 22 of the 33 producing States. These 22 States accounted for 66 percent of total 1998 gross withdrawals. In addition, the gross withdrawal data from Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 39 percent of total production, excluded all or most of the nonhydrocarbon gases removed on leases. The State of Missouri reported zero gross withdrawals.

The commercial recovery of methane from coalbeds contribute a significant amount to the production totals in a number of States. Coalbed methane seams production quantities (in million cubic feet) are included in gross withdrawals totals for the following States: Alabama (116,946), Colorado (387,376), and New Mexico (608,000).

Summary of Data Reporting Requirements

The Form EIA-895 is a two-page form divided into five parts. Part I requests identifying information including the name and location of the responding State agency and the name and telephone number of a contact person within the agency. Part II collects monthly data on the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; and marketed production. Part III of the form is for reporting the monthly volume and value of marketed production. Part IV of the form is the annual schedule which collects data on the number of producing gas wells, the production of natural

gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; marketed production; the value of marketed production; and quantity of marketed production (value based). Part V is space to be used by the respondent to explain data elements reported that may be based on definitions differing from those applied to data in previous years.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 is a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8 / FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8 / EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8 / EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 114 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and / or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days

after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to re-file reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different. Prior to 1995, the Form FPC-14 was filed annual by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export were originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of approximately 400 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors—residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata—companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two

consumer sectors—the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value ($C_{.j}$) were included in the certainty stratum. The formula for $C_{.j}$ was:

$$C_{.j} = \frac{X_{.j}}{2n} \qquad (1)$$

where:

$C_{.j}$ = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

$X_{i.}$ = the sum within State of annual gas volumes for company i,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{i.}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n\frac{X2}{X_{..}} \qquad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X2 = the sum within State of the Xi. for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using.

A uniform random number R was selected between zero and $\left(I = \frac{X2}{m}\right)$I. The first sampled company was the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than R + I. R + I was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X2 was the sum within State of the $X_{i.}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_{.j}}{Y'_{.j}} \qquad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

Y'_j = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_{.j} = {}_{y.j} \times E_{vj} \qquad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector *j*,

y_j = the sum within State of reported monthly gas volumes in consumer sector *j*.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_t - 1 \times \frac{y_{.jt}}{y_{.jt-1}} \qquad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

y_{jt-1} = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V^*_{jm} = V_{jm} + \left[(V_{ja} - V'_{jm})(\frac{V_{jm}}{V'_{jm}}) \right] \qquad (6)$$

where:

V^*_{jm} = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.

The formula for revising the estimated revenue is:

$$R^*_{jm} = R_{jm} + \left[(R_{ja} - R'_{jm})(\frac{R_{jm}}{R'_{jm}}) \right] \qquad (7)$$

where:

R^*_{jm} = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^{H} \left[N_h^2 \frac{(1 - \frac{n_h}{N_h}}{n_h(n_h - 1)} \left(\sum_{i=1} (y_i - Tx_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h= the total number of companies in stratum h

n_h= the sample size in stratum h

y_i= the reported monthly volume for company i

x_i= the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, September 1999

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	119	230	4,338	NA	0.53	1.42	0.57
Alaska	0	0	0	0	—	—	—
Arizona	18	95	0	97	0.23	0.05	—
Arkansas	NA	NA	88	NA	NA	NA	0.17
California	199	98	847	876	0.06	0.05	0.71
Colorado	NA	NA	NA	NA	NA	NA	NA
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	28	166	1,316	1,327	0.46	0.25	0.28
Georgia	NA	NA	NA	NA	NA	NA	NA
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	210	895	1,971	2,175	0.26	1.12	0.15
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	10	9	50	52	0.13	0.06	0.20
Kansas	1,311	709	893	1,737	3.04	2.49	0.68
Kentucky	140	233	426	505	0.37	0.31	0.88
Louisiana	15	37	4,731	4,731	0.10	0.08	0.04
Maine	0	0	0	0	—	—	—
Maryland	4	13	10	17	—	0.02	0.02
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	34	107	1,419	1,424	0.08	0.05	0.14
Minnesota	227	211	511	598	0.10	0.17	0.18
Mississippi	1,388	72	753	1,580	12.33	0.28	1.13
Missouri	354	122	888	964	0.22	0.03	2.58
Montana	5	4	0	6	—	0.03	—
Nebraska	13	15	111	113	0.18	0.05	0.03
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	81	80	8,245	8,246	0.05	0.08	0.65
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	45	31	312	317	0.14	0.04	0.10
North Dakota	0	0	0	0	—	—	—
Ohio	127	156	963	983	0.62	0.13	0.14
Oklahoma	140	256	1,173	1,208	0.51	0.16	0.59
Oregon	0	0	0	0	—	—	—
Pennsylvania	29	1	828	829	0.01	0.02	0.06
Rhode Island	0	0	0	0	—	—	—
South Carolina	19	75	775	779	0.74	0.16	0.05
South Dakota	0	0	0	0	—	—	—
Tennessee	104	190	2,058	2,069	0.39	0.28	0.60
Texas	13	1,413	0	1,413	0.02	0.32	—
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	102	341	NA	NA	0.83	0.23	NA
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	26	599	112	610	0.38	0.24	2.34
Wisconsin	250	214	208	390	0.52	0.88	0.38
Wyoming	36	58	NA	NA	0.17	0.51	NA
Total	**2,246**	**3,639**	**12,176**	**12,906**	**0.08**	**0.15**	**0.14**

NA Not Available.
— Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*, DOE/EIA-0131(93/S), February 1995.
- *Natural Gas 1996 Issues and Trends*, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/ EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/ EIA-01733(95), July 1996. Published annually.*
- *Annual Energy Outlook 1996*, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

Feature Articles

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

July 1998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

April 1999

Natural Gas 1998: Issues and Trends - Executive Summary

(Examines the current natural marketplace from a series of vantage points.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

May 1998

Deliverability on the Interstate Natural Gas Pipeline System

(Examines the capability of the interstate pipeline network to move gas to various U.S. markets and discusses changes occurring since 1990.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas)

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.)pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural Gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

July l998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1998

U.S. Natural Gas Imports and Exports - 1997

(Contains final 1997 data on all U.S. imports and exports of natural gas.)

April 1999

Natural Gas 1998: A Preliminary Summary

(Reviews data for 1998 based on Energy Information Administration surveys.)

July 1999

Retail Unbundling

(This report provides a brief summary of the status of retail unbundling programs.)

August 1999

U.S. Natural Gas Imports and Exports - 1998

(Contains final 1998 data on all U.S. imports and exports of natural gas.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1,2,3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202)586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202)586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Ann Ducca (202)586-6137
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202)586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and Export Sales and Price Report	Ann Ducca (202)586-6137
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202)586-6119
Underground Storage:	9,10,11, 12,13,14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption: Deliveries to: Residential, Commercial, Industrial, Electric Utility, All Consumers	 15 16 17 18 19	 Monthly:	 Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	 Roy Kass (202)586-4790
Average Price to: City Gate, Residential, Commercial, Industrial, Electric Utility Onsystem Sales	 20 21 22 23 24 25	 Monthly: Monthly:	 Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants" Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	 Roy Kass (202)586-4790 Roy Kass (202)586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Patricia Wells (202)586-6077
Highlights				Mary Carlson (202)586-4749

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the termperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent: Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oi1 in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.